LAMPIRAN A

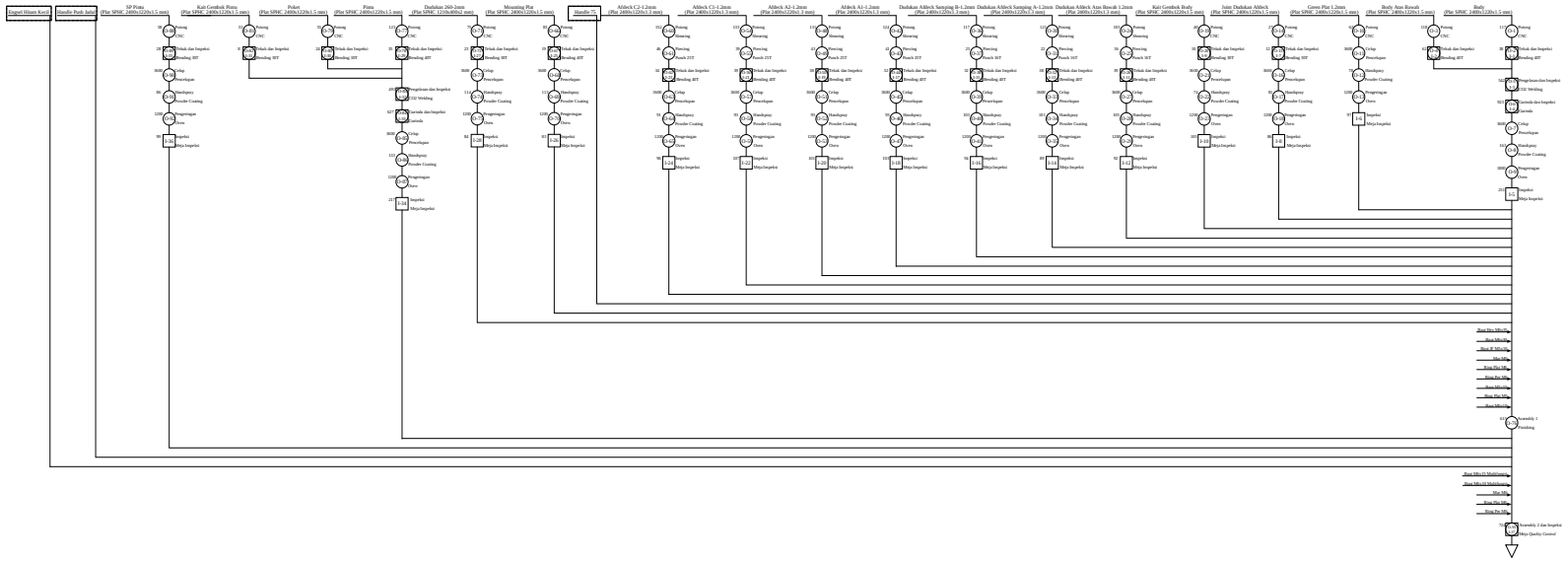
Peta Proses Operasi *Box* Panel *Wall Mounting*

A. Peta Proses Operasi *Box* Panel *Wall Mounting*

PETA PROSES OPERASI

No. Produk : 1
Nama Produk : *Box* Panel *Wall Mounting*

Dipetakan Oleh : Sonny Mulia
Tanggal Dipetakan : 15 Oktober 2018



RINGKASAN		
	Jumlah	Waktu (s)
Operasi	93	76.662
Inspeksi	37	1.704
Operasi dan Pemeriksaan	22	3.818
Total	152	82.184

LAMPIRAN B

Data Waktu

Efisiensi Mesin dan

Reliabilitas Mesin

A. Efisiensi Mesin

Tabel B.1
Efisiensi Mesin

No	Nama Mesin	*Part*	Waktu Baku (2013)	Data Waktu						
				1	2	3	4	5	$\bar{X}$	%E
1	CNC	*Body*	117	0	0	0	0	0	0	100%
		Body Atas Bawah	118	0	0	0	0	0	0	100%
		Green Plate 1.2mm	62	0	0	0	0	0	0	100%
		Joint Dudukan *Afdeck*	27	0	0	0	0	0	0	100%
		Kait Gembok *Body*	40	0	0	0	0	0	0	100%
		Mounting Plate	83	0	0	0	0	0	0	100%
		Dudukan 260-2mm	75	0	0	0	0	0	0	100%
		Kait Gembok Pintu	33	0	0	0	0	0	0	100%
		Pintu	123	0	0	0	0	0	0	100%
		Poket	55	0	0	0	0	0	0	100%
		SP Pintu 325	58	0	0	0	0	0	0	100%
2	*Shearing*	Dudukan *Afdeck* Atas Bawah 1.2mm	103	121	125	124	120	125	123	83.740%
		Dudukan *Afdeck* Samping A-1.2mm	121	155	151	151	158	152	153.4	78.879%
		Dudukan *Afdeck* Samping B-1.2mm	117	137	137	135	140	140	137.8	84.906%
		Afdeck A1-1.2mm	124	153	157	157	152	156	155	80.000%
		Afdeck A2-1.2mm	131	156	155	154	154	155	154.8	84.625%
		Afdeck C1-1.2mm	133	156	160	157	159	160	158.4	83.965%
		Afdeck C2-1.2mm	152	160	158	160	158	161	159.4	95.358%
3	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	36	44	43	43	42	44	43.2	83.333%
		Dudukan *Afdeck* Samping A-1.2mm	22	31	32	31	34	31	31.8	69.182%
		Dudukan *Afdeck* Samping B-1.2mm	25	32	34	30	30	35	32.2	77.640%
4	*Punch* 25T	*Afdeck* A1-1.2mm	41	50	54	49	49	54	51.2	80.078%
		Afdeck A2-1.2mm	43	54	54	52	54	49	52.6	81.749%
		Afdeck C1-1.2mm	39	50	54	53	53	52	52.4	74.427%
		Afdeck C2-1.2mm	46	50	51	51	54	49	51	90.196%
5	*Bending* 30T	*Joint* Dudukan *Afdeck*	12	18	18	16	19	16	17.4	68.966%
		Kait Gembok *Body*	10	16	17	15	18	15	16.2	61.728%
		Dudukan 260-2mm	23	32	34	36	33	32	33.4	68.862%
		Kait Gembok Pintu	8	13	13	14	14	12	13.2	60.606%
		Poket	24	32	37	36	35	33	34.6	69.364%
		SP Pintu 325	28	38	39	35	37	40	37.8	74.074%
6	*Bending* 40T	*Body* Atas Bawah	62	80	76	79	76	79	78	79.487%
		Body	38	43	43	44	44	44	43.6	87.156%
		Dudukan *Afdeck* Atas Bawah 1.2mm	39	47	47	46	47	47	46.8	83.333%
		Dudukan *Afdeck* Samping A-1.2mm	38	43	47	43	46	44	44.6	85.202%
		Dudukan *Afdeck* Samping B-1.2mm	32	45	47	46	46	43	45.4	70.485%
		Afdeck A1-1.2mm	32	46	47	45	44	44	45.2	70.796%
		Afdeck A2-1.2mm	38	46	44	45	44	43	44.4	85.586%
		Afdeck C1-1.2mm	39	47	44	46	43	45	45	86.667%
		Afdeck C2-1.2mm	34	46	44	46	44	44	44.8	75.893%
		Mounting Plate	19	25	28	30	23	29	27	70.370%
		Pintu	35	45	45	47	44	43	44.8	78.125%
7	CO2 *Welding*	Sub *Assembly* 1	542	587	575	582	594	591	585.8	92.523%
		Sub *Assembly* 2	491	523	531	531	537	539	532.2	92.259%
8	Gurinda	Sub *Assembly* 1	923	950	964	980	975	972	968.2	95.332%
		Sub *Assembly* 2	627	679	667	672	669	672	671.8	93.331%

Tabel B.1
Efisiensi Mesin (Lanjutan)

No	Nama Mesin	*Part*	Waktu Baku (2013)	Data Waktu 1	2	3	4	5	$\bar{X}$	%E
9	Pencelupan	Sub *Assembly* 1	3600	0	0	0	0	0	0	100%
		Green Plate 1.2mm	3600	0	0	0	0	0	0	100%
		Joint Dudukan *Afdeck*	3600	0	0	0	0	0	0	100%
		Kait Gembok *Body*	3600	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Atas Bawah 1.2mm	3600	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Samping A-1.2mm	3600	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Samping B-1.2mm	3600	0	0	0	0	0	0	100%
		Afdeck A1-1.2mm	3600	0	0	0	0	0	0	100%
		Afdeck A2-1.2mm	3600	0	0	0	0	0	0	100%
		Afdeck C1-1.2mm	3600	0	0	0	0	0	0	100%
		Afdeck C2-1.2mm	3600	0	0	0	0	0	0	100%
		Mounting Plate	3600	0	0	0	0	0	0	100%
		Dudukan 260-2mm	3600	0	0	0	0	0	0	100%
		Sub *Assembly* 2	3600	0	0	0	0	0	0	100%
		SP Pintu 325	3600	0	0	0	0	0	0	100%
10	*Handspray*	Sub *Assembly* 1	163	219	210	207	207	209	210.4	77.471%
		Green Plate 1.2mm	78	127	129	126	123	125	126	61.905%
		Joint Dudukan *Afdeck*	81	127	122	127	128	124	125.6	64.490%
		Kait Gembok *Body*	74	120	121	118	121	121	120.2	61.564%
		Dudukan *Afdeck* Atas Bawah 1.2mm	105	155	153	155	152	155	154	68.182%
		Dudukan *Afdeck* Samping A-1.2mm	101	155	152	155	147	152	152.2	66.360%
		Dudukan *Afdeck* Samping B-1.2mm	103	153	143	148	143	144	146.2	70.451%
		Afdeck A1-1.2mm	93	132	141	137	135	137	136.4	68.182%
		Afdeck A2-1.2mm	95	150	146	151	153	145	149	63.758%
		Afdeck C1-1.2mm	93	132	135	135	142	142	137.2	67.784%
		Afdeck C2-1.2mm	91	133	142	133	138	137	136.6	66.618%
		Mounting Plate	113	163	155	160	162	155	159	71.069%
		Dudukan 260-2mm	114	177	172	171	169	174	172.6	66.049%
		Sub *Assembly* 2	133	171	170	175	180	173	173.8	76.525%
		SP Pintu 325	86	130	132	133	136	137	133.6	64.371%
11	*Oven*	Sub *Assembly* 1	1800	0	0	0	0	0	0	100%
		Green Plate 1.2mm	1200	0	0	0	0	0	0	100%
		Joint Dudukan *Afdeck*	1200	0	0	0	0	0	0	100%
		Kait Gembok *Body*	1200	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Atas Bawah 1.2mm	1200	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Samping A-1.2mm	1200	0	0	0	0	0	0	100%
		Dudukan *Afdeck* Samping B-1.2mm	1200	0	0	0	0	0	0	100%
		Afdeck A1-1.2mm	1200	0	0	0	0	0	0	100%
		Afdeck A2-1.2mm	1200	0	0	0	0	0	0	100%
		Afdeck C1-1.2mm	1200	0	0	0	0	0	0	100%
		Afdeck C2-1.2mm	1200	0	0	0	0	0	0	100%
		Mounting Plate	1200	0	0	0	0	0	0	100%
		Dudukan 260-2mm	1200	0	0	0	0	0	0	100%
		Sub *Assembly* 2	1200	0	0	0	0	0	0	100%
		SP Pintu 325	1200	0	0	0	0	0	0	100%
12	Meja Inspeksi	Sub *Assembly* 1	251	333	330	322	326	319	326	76.994%
		Green Plate 1.2mm	97	131	135	143	134	141	136.8	70.906%
		Joint Dudukan *Afdeck*	86	114	110	110	117	116	113.4	75.838%
		Kait Gembok *Body*	105	135	138	141	133	144	138.2	75.977%
		Dudukan *Afdeck* Atas Bawah 1.2mm	92	134	126	128	137	122	129.4	71.097%
		Dudukan *Afdeck* Samping A-1.2mm	89	116	124	128	128	117	122.6	72.594%
		Dudukan *Afdeck* Samping B-1.2mm	94	129	123	138	122	138	130	72.308%
		Afdeck A1-1.2mm	103	131	143	132	136	139	136.2	75.624%
		Afdeck A2-1.2mm	101	148	147	134	148	133	142	71.127%
		Afdeck C1-1.2mm	107	150	143	141	139	137	142	75.352%
		Afdeck C2-1.2mm	96	124	124	124	127	124	124.6	77.047%
		Mounting Plate	83	108	109	105	107	105	106.8	77.715%
		Dudukan 260-2mm	84	103	102	110	110	110	107	78.505%
		Sub *Assembly* 2	217	243	240	253	256	244	247.2	87.783%
		SP Pintu 325	99	127	124	121	131	132	127	77.953%
13	*Finishing*	*Assembly* 1	615	642	659	643	647	647	647.6	94.966%
14	Meja QC	*Assembly* 2 dan Inspeksi	724	814	805	808	815	820	812.4	89.119%

Contoh perhitungan pada mesin *shearing* untuk pembuatan *part* dudukan *afdeck* atas bawah 1.2mm:

$$\%\text{Efisiensi} = \frac{\text{Waktu baku yang lalu}}{\text{rata-rata waktu aktual}} * 100\%$$

$$= \frac{103}{(121+125+124+120+125)/5} * 100\%$$

$$= 83{,}740\%$$

Waktu aktual didapat dari menghitung langsung ke PT. DIMM dengan menggunakan *stopwatch* yang diambil waktu masing-masing mesin dan *part* sebanyak lima kali.

B. Reliabilitas Mesin

Tabel B.2
Reliabilitas Mesin

No	Nama Mesin	*Part*	Jumlah Jam Kerja (jam)	Jumlah Jam Pemakaian Mesin (jam)	%R
1	CNC	*Body* Atas Bawah	7	6	85.714%
		Body	7	6	85.714%
		Green Plate 1.2mm	7	6	85.714%
		Joint Dudukan *Afdeck*	7	6	85.714%
		Kait Gembok *Body*	7	6	85.714%
		Mounting Plate	7	6	85.714%
		Dudukan 260-2mm	7	6	85.714%
		Kait Gembok Pintu	7	6	85.714%
		Pintu	7	6	85.714%
		Poket	7	6	85.714%
		SP Pintu 325	7	6	85.714%
2	*Shearing*	Dudukan *Afdeck* Atas Bawah 1.2mm	7	5	71.429%
		Dudukan *Afdeck* Samping A-1.2mm	7	5	71.429%
		Dudukan *Afdeck* Samping B-1.2mm	7	5	71.429%
		Afdeck A1-1.2mm	7	5	71.429%
		Afdeck A2-1.2mm	7	5	71.429%
		Afdeck C1-1.2mm	7	5	71.429%
		Afdeck C2-1.2mm	7	5	71.429%
3	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	7	4	57.143%
		Dudukan *Afdeck* Samping A-1.2mm	7	4	57.143%
		Dudukan *Afdeck* Samping B-1.2mm	7	4	57.143%
4	*Punch* 25T	*Afdeck* A1-1.2mm	7	4	57.143%
		Afdeck A2-1.2mm	7	4	57.143%
		Afdeck C1-1.2mm	7	4	57.143%
		Afdeck C2-1.2mm	7	4	57.143%
5	*Bending* 30T	*Joint* Dudukan *Afdeck*	7	5	71.429%
		Kait Gembok *Body*	7	5	71.429%
		Dudukan 260-2mm	7	5	71.429%
		Kait Gembok Pintu	7	5	71.429%
		Poket	7	5	71.429%
		SP Pintu 325	7	5	71.429%
6	*Bending* 40T	*Body* Atas Bawah	7	4.5	64.286%
		Body	7	4.5	64.286%
		Dudukan *Afdeck* Atas Bawah 1.2mm	7	4.5	64.286%
		Dudukan *Afdeck* Samping A-1.2mm	7	4.5	64.286%
		Dudukan *Afdeck* Samping B-1.2mm	7	4.5	64.286%
		Afdeck A1-1.2mm	7	4.5	64.286%
		Afdeck A2-1.2mm	7	4.5	64.286%
		Afdeck C1-1.2mm	7	4.5	64.286%
		Afdeck C2-1.2mm	7	4.5	64.286%
		Mounting Plate	7	4.5	64.286%
		Pintu	7	4.5	64.286%
7	CO2 *Welding*	Sub *Assembly* 1	7	4	57.143%
		Sub *Assembly* 2	7	4	57.143%
8	Gurinda	Sub *Assembly* 1	7	4	57.143%
		Sub *Assembly* 2	7	4	57.143%

Tabel B.2
Reliabilitas Mesin (Lanjutan)

No	Nama Mesin	*Part*	Jumlah Jam Kerja (jam)	Jumlah Jam Pemakaian Mesin (jam)	%R
9	Pencelupan	Sub *Assembly* 1	7	6.5	92.857%
		Green Plate 1.2mm	7	6.5	92.857%
		Joint Dudukan *Afdeck*	7	6.5	92.857%
		Kait Gembok *Body*	7	6.5	92.857%
		Dudukan *Afdeck* Atas Bawah 1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping A-1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping B-1.2mm	7	6.5	92.857%
		Afdeck A1-1.2mm	7	6.5	92.857%
		Afdeck A2-1.2mm	7	6.5	92.857%
		Afdeck C1-1.2mm	7	6.5	92.857%
		Afdeck C2-1.2mm	7	6.5	92.857%
		Mounting Plate	7	6.5	92.857%
		Dudukan 260-2mm	7	6.5	92.857%
		Sub *Assembly* 2	7	6.5	92.857%
		SP Pintu 325	7	6.5	92.857%
10	*Handspray*	Sub *Assembly* 1	7	6.5	92.857%
		Green Plate 1.2mm	7	6.5	92.857%
		Joint Dudukan *Afdeck*	7	6.5	92.857%
		Kait Gembok *Body*	7	6.5	92.857%
		Dudukan *Afdeck* Atas Bawah 1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping A-1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping B-1.2mm	7	6.5	92.857%
		Afdeck A1-1.2mm	7	6.5	92.857%
		Afdeck A2-1.2mm	7	6.5	92.857%
		Afdeck C1-1.2mm	7	6.5	92.857%
		Afdeck C2-1.2mm	7	6.5	92.857%
		Mounting Plate	7	6.5	92.857%
		Dudukan 260-2mm	7	6.5	92.857%
		Sub *Assembly* 2	7	6.5	92.857%
		SP Pintu 325	7	6.5	92.857%
11	*Oven*	Sub *Assembly* 1	7	6.5	92.857%
		Green Plate 1.2mm	7	6.5	92.857%
		Joint Dudukan *Afdeck*	7	6.5	92.857%
		Kait Gembok *Body*	7	6.5	92.857%
		Dudukan *Afdeck* Atas Bawah 1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping A-1.2mm	7	6.5	92.857%
		Dudukan *Afdeck* Samping B-1.2mm	7	6.5	92.857%
		Afdeck A1-1.2mm	7	6.5	92.857%
		Afdeck A2-1.2mm	7	6.5	92.857%
		Afdeck C1-1.2mm	7	6.5	92.857%
		Afdeck C2-1.2mm	7	6.5	92.857%
		Mounting Plate	7	6.5	92.857%
		Dudukan 260-2mm	7	6.5	92.857%
		Sub *Assembly* 2	7	6.5	92.857%
		SP Pintu 325	7	6.5	92.857%
12	Meja Inspeksi	Sub *Assembly* 1	7	4	57.143%
		Green Plate 1.2mm	7	4	57.143%
		Joint Dudukan *Afdeck*	7	4	57.143%
		Kait Gembok *Body*	7	4	57.143%
		Dudukan *Afdeck* Atas Bawah 1.2mm	7	4	57.143%
		Dudukan *Afdeck* Samping A-1.2mm	7	4	57.143%
		Dudukan *Afdeck* Samping B-1.2mm	7	4	57.143%
		Afdeck A1-1.2mm	7	4	57.143%
		Afdeck A2-1.2mm	7	4	57.143%
		Afdeck C1-1.2mm	7	4	57.143%
		Afdeck C2-1.2mm	7	4	57.143%
		Mounting Plate	7	4	57.143%
		Dudukan 260-2mm	7	4	57.143%
		Sub *Assembly* 2	7	4	57.143%
		SP Pintu 325	7	4	57.143%
13	*Finishing*	*Assembly* 1	7	4	57.143%
14	Meja QC	*Assembly* 2 dan Inspeksi	7	4	57.143%

Contoh perhitungan pada mesin CNC pada pembuatan *part body* atas bawah:

$$\%\text{Reliabilitas} = \frac{\text{Jumlah jam kerja mesin}}{\text{jumlah jam kerja efektif}} * 100\%$$

$$= \frac{6}{7} * 100\%$$

$$= 85.714\%$$

LAMPIRAN C

Perhitungan dan Tahap Pengerjaan Matriks *Clustering*

A. Langkah-langkah Matriks *Clustering* Metode *Single Linkage Clustering*

Tabel C-1
Matriks Awal SLC

Mesin	*Body*	*Body* Atas Bawah	*Sub Assembly* 1	*Green Plate* 1.2mm	*Joint* Dudukan *Afdeck*	Kait Gembok *Body*	Dudukan *Afdeck* Atas Bawah 1.2mm	Dudukan *Afdeck* Samping A-1.2mm	Dudukan *Afdeck* Samping B-1.2mm	*Afdeck* A1-1.2mm	*Afdeck* A2-1.2mm	*Afdeck* C1-1.2mm	*Afdeck* C2-1.2mm	*Mounting Plate*	Dudukan 260 2mm	*Assembly* 1	Pintu	Poket	Kait Gembok Pintu	*Sub Assembly* 2	SP Pintu 325	Meja QC
Computer Numerical Control (CNC)	1	1		1	1	1								1	1		1	1	1		1	
Shearing							1	1	1	1	1	1	1									
Punch 16T							1	1	1													
Punch 25T										1	1	1	1									
Bending 30T					1	1									1			1	1		1	
Bending 40T	1	1					1	1	1	1	1	1	1	1			1					
CO2 *Welding*			1																	1		
Gurinda			1																	1		
Pencelupan			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	
Powder Coating			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	
Oven			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	
Meja Inspeksi			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1	
Finishing																1						
Meja QC																						1

1. Tahap pertama, hitung matriks awal menjadi perhitungan matriks SLC. Untuk membuat perhitungan matriks SLC, digunakan rumus sebagai berikut:

$$Smn = a / (a + b + c + d),\ 0 \leq Smn \leq 1$$

Smn = kesamaan mesin antara mesin m dan mesin n.

a = nomor *part* yang menuju mesin yang sama.

b = nomor *part* yang menuju mesin m dan tidak menuju mesin n.

c = nomor *part* yang menuju mesin n dan tidak menuju mesin m.

d = nomor *part* yang tidak menuju mesin m dan mesin n.

Tabel C-2
Matriks 1

Matriks 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1														
2	0.000													
3	0.000	0.429												
4	0.000	0.571	0.000											
5	0.545	0.000	0.000	0.000										
6	0.222	0.636	0.273	0.364	0.000									
7	0.000	0.000	0.000	0.000	0.000	0.000								
8	0.000	0.000	0.000	0.000	0.000	0.000	1.000							
9	0.300	0.467	0.200	0.267	0.235	0.444	0.133	0.133						
10	0.300	0.467	0.200	0.267	0.235	0.444	0.133	0.133	1.000					
11	0.300	0.467	0.200	0.267	0.235	0.444	0.133	0.133	1.000	1.000				
12	0.300	0.467	0.200	0.267	0.235	0.444	0.133	0.133	1.000	1.000	1.000			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Contoh perhitungan:

$S_{1,5} = 6 / (6 + 5)$

$= 0.545$

Kemudian setelah merubah matriks awal menjadi matriks perhitungan SLC, cari nilai maksimasi dari matriks 1. Ditemukan nilai maksimasi pada matriks 1 adalah 1 di mesin 7, 8.

2. Untuk tahap selanjutnya, kolom 7 dan baris 7 disatukan dengan kolom 8 dan baris 8 (dapat dilihat di tabel C-3). Kemudian untuk kolom 7, 8 diisi dengan nilai maksimasi dari kolom 7 dan kolom 8, lalu untuk baris 7, 8 diisi dengan nilai maksimasi dari baris 7 dan baris 8. Untuk kolom dan baris lainnya sama dengan tabel matriks 1. Setelah tabelnya terisi semua, cari nilai maksimal dari tabel matriks 2. Ditemukan nilai maksimalnya adalah 1 di mesin 9, 10.

Tabel C-3
Matriks 2

Matriks 2	1	2	3	4	5	6	7,8	9	10	11	12	13	14
1													
2	0.000												
3	0.000	0.429											
4	0.000	0.571	0.000										
5	0.545	0.000	0.000	0.000									
6	0.222	0.636	0.273	0.364	0.000								
7,8	0.000	0.000	0.000	0.000	0.000	0.000							
9	0.300	0.467	0.200	0.267	0.235	0.444	0.133						
10	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000					
11	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000	1.000				
12	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000	1.000	1.000			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

3. Untuk tahap selanjutnya dan seterusnya, pengerjaan dan perhitungan sama seperti tahap sebelumnya (nomor 2).

Tabel C-4
Matriks 3

Matriks 3	1	2	3	4	5	6	7,8	9,10	11	12	13	14
1												
2	0.000											
3	0.000	0.429										
4	0.000	0.571	0.000									
5	0.545	0.000	0.000	0.000								
6	0.222	0.636	0.273	0.364	0.000							
7,8	0.000	0.000	0.000	0.000	0.000	0.000						
9,10	0.300	0.467	0.200	0.267	0.235	0.444	0.133					
11	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000				
12	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000	1.000			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Tabel C-5
Matriks 4

Matriks 4	1	2	3	4	5	6	7,8	9,10	11,12	13	14
1											
2	0.000										
3	0.000	0.429									
4	0.000	0.571	0.000								
5	0.545	0.000	0.000	0.000							
6	0.222	0.636	0.273	0.364	0.000						
7,8	0.000	0.000	0.000	0.000	0.000	0.000		`			
9,10	0.300	0.467	0.200	0.267	0.235	0.444	0.133				
11,12	0.300	0.467	0.200	0.267	0.235	0.444	0.133	1.000			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Tabel C-6
Matriks 5

Matriks 5	1	2	3	4	5	6	7,8	9,10,11,12	13	14
1										
2	0.000									
3	0.000	0.429								
4	0.000	0.571	0.000							
5	0.545	0.000	0.000	0.000						
6	0.222	0.636	0.273	0.364	0.000					
7,8	0.000	0.000	0.000	0.000	0.000	0.000				
9,10,11,12	0.300	0.467	0.200	0.267	0.235	0.444	0.133			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Tabek C-7
Matriks 6

Matriks 6	1	2,6	3	4	5	7,8	9,10,11,12	13	14
1									
2,6	0.222								
3	0.000	0.429							
4	0.000	0.571	0.000						
5	0.545	0.000	0.000	0.000					
7,8	0.000	0.000	0.000	0.000	0.000				
9,10,11,12	0.300	0.467	0.200	0.267	0.235	0.133			
13	0.000	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Tabel C-8
Matriks 7

Matriks 7	1	2,6,4	3	5	7,8	9,10,11,12	13	14
1								
2,6,4	0.222							
3	0.000	0.429						
5	0.545	0.000	0.000					
7,8	0.000	0.000	0.000	0.000				
9,10,11,12	0.300	0.467	0.200	0.235	0.133			
13	0.000	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Tabel C-9
Matriks 8

Matriks 8	1,5	2,6,4	3	7,8	9,10,11,12	13	14
1,5							
2,6,4	0.222						
3	0.000	0.429					
7,8	0.000	0.000	0.000				
9,10,11,12	0.300	0.467	0.200	0.133			
13	0.000	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	0.000	

Tabel C-10
Matriks 9

Matriks 9	1,5	2,6,4,9,10,11,12	3	7,8	13	14
1,5						
2,6,4,9,10,11,12	0.300					
3	0.000	0.429				
7,8	0.000	0.133	0.000			
13	0.000	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	0.000	

Tabel C-11
Matriks 10

Matriks 10	1,5	2,6,4,9,10,11,12,3	7,8	13	14
1,5					
2,6,4,9,10,11,12,3	0.300				
7,8	0.000	0.133			
13	0.000	0.000	0.000		
14	0.000	0.000	0.000	0.000	

Tabel C-12
Matriks 11

Matriks 11	1,5,2,6,4,9,10,11,12,3	7,8	13	14
1,5,2,6,4,9,10,11,12,3				
7,8	0.133			
13	0.000	0.000		
14	0.000	0.000	0.000	

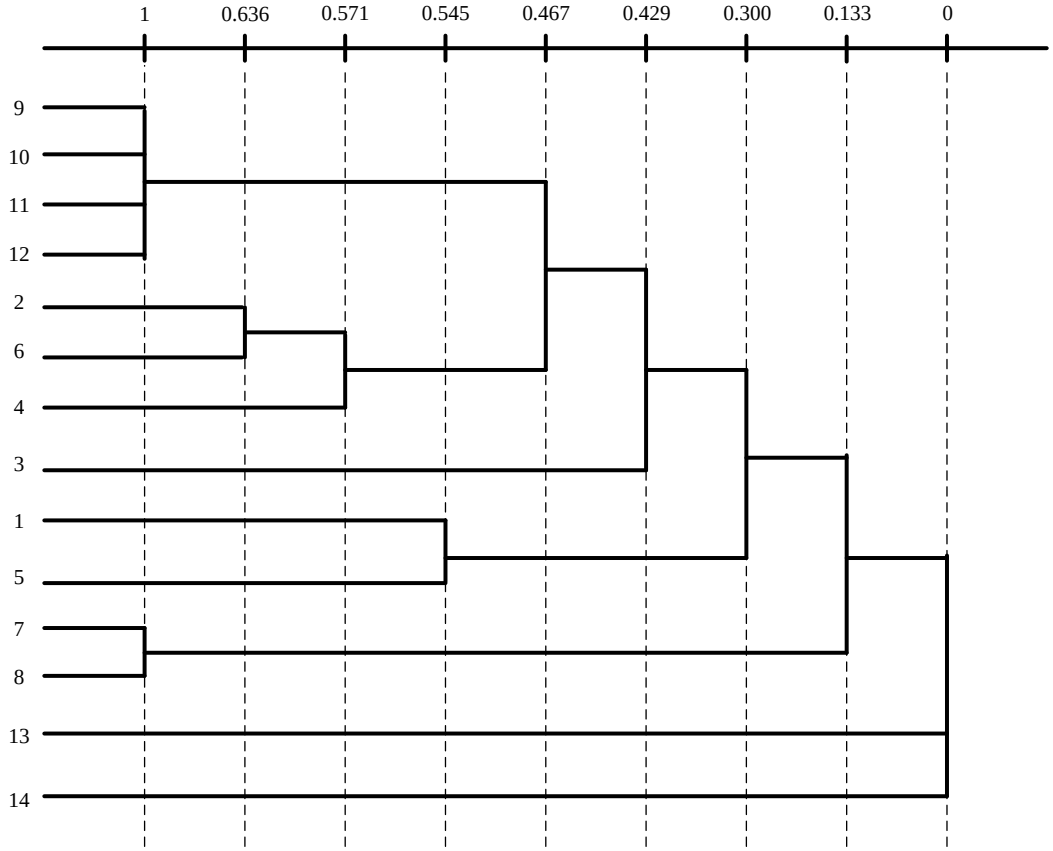
Tabel C-13
Matriks 12

Matriks 12	1,5,2,6,4,9,10,11,12,3,7,8	13	14
1,5,2,6,4,9,10,11,12,3,7,8			
13	0.000		
14	0.000	0.000	

Tabel C-14
Matriks 13

Matriks 13	1,5,2,6,4,9,10,11,12,3,7,8,13	14
1,5,2,6,4,9,10,11,12,3,7,8,13		
14	0.000	

4. Setelah selesai menghitung matriks SLC, buat diagram *dendogram* untuk mengetahui jumlah dan pengelompokkan sel.



Gambar C-1
Dendogram

5. Setelah membuat diagram *dendogram*, buat matriks untuk mesin dan *part* sesuai dengan *dendogram*.

Tabel C-15
Pembagian Sel Pertama

Sel Mesin		Part 1	Part 2	Part 3	Part 4	Part 5	Part 6	Part 7	Part 8	Part 9	Part 10	Part 11	Part 12	Part 13	Part 14	Part 15	Part 16	Part 17	Part 18	Part 19	Part 20	Part 21	Part 22
1	9			√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	
	10			√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	
	11			√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	
	12			√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	
	2							√	√	√	√	√	√	√									
	6	√	√					√	√	√	√	√	√	√	√			√					
	4										√	√	√	√									
	3							√	√	√													
	1	√	√		√	√	√								√	√		√	√	√		√	
	5					√	√									√			√	√		√	
	7			√																	√		
	8			√																	√		
2	13																√						
3	14																						√

Tabel C-16
Pengurutan Berdasarkan Sel

Sel Mesin		Part 10	Part 11	Part 12	Part 13	Part 7	Part 8	Part 9	Part 14	Part 3	Part 20	Part 5	Part 21	Part 6	Part 15	Part 4	Part 1	Part 2	Part 17	Part 18	Part 19	Part 16	Part 22
1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	2	1	1	1	1	1	1	1															
	6	1	1	1	1	1	1	1	1								1	1	1				
	4	1	1	1	1																		
	3					1	1	1															
	1								1			1	1	1	1	1	1	1	1	1	1		
	5											1	1	1	1					1	1		
	7									1	1												
	8									1	1												
2	13																					1	
	14																						1

Kemudian untuk menentukan banyak sel yang digunakan, gunakan rumus:

$$\text{Jumlah Sel} = \sqrt{\frac{n}{2}} \text{ ; n = jumlah mesin}$$

$$\text{Jumlah Sel} = \sqrt{\frac{17}{2}} = 2.91 \approx \text{2-3 sel}$$

6. Kemudian, buat matriks akhir dengan menentukan sel sebelum *adjustment* dan sesudah *adjustment*. Pilih matriks akhir dengan membandingkan nilai *Grouping Efficiency*.

Tabel C-17
Matriks Akhir Sebelum *Adjustment*

Sel Mesin		Part 10	Part 11	Part 12	Part 13	Part 7	Part 8	Part 9	Part 14	Part 3	Part 20	Part 5	Part 21	Part 6	Part 15	Part 4	Part 1	Part 2	Part 17	Part 18	Part 19	Part 16	Part 22
1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	2	1	1	1	1	1	1	1															
	6	1	1	1	1	1	1	1	1								1	1	1				
	4	1	1	1	1																		
	3					1	1	1															
	1								1			1	1	1	1	1	1	1	1	1	1		
	5											1	1	1	1					1	1		
	7									1	1												
	8									1	1												
2	13																					1	
	14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

o = jumlah angka 1 dalam matriks

e = jumlah *exceptional elements* dalam solusi

v = jumlah *voids* dalam solusi

M = jumlah mesin

P = jumlah *part*

η = *grouping efficiency*

$$\eta = (0.5) * \frac{108 - 0}{108 - 0 + 136} + (1 - 0.5) * \frac{(14 * 22) - 108 - 136}{(14 * 22) - 108 - 136 + 0}$$

$$\eta = 0.7213 \approx 72.13\%$$

Tabel C-18
Matriks Akhir Sesudah *Adjustment*

Sel Mesin		Part 10	Part 11	Part 12	Part 13	Part 7	Part 8	Part 9	Part 14	Part 3	Part 20	Part 5	Part 21	Part 6	Part 15	Part 4	Part 1	Part 2	Part 17	Part 18	Part 19	Part 16	Part 22
1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
	2	1	1	1	1	1	1	1															
	6	1	1	1	1	1	1	1	1								1	1	1				
	4	1	1	1	1																		
	3					1	1	1															
	7									1	1												
	8									1	1												
2	1								1			1	1	1	1	1	1	1	1	1	1		
	5											1	1	1	1					1	1		
3	13																					1	
	14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

$$\eta = (0.5) * \frac{95 - 13}{95 - 13 + 69} + (1 - 0.5) * \frac{(14 * 22) - 95 - 69}{(14 * 22) - 95 - 69 + 13}$$

$$\eta = 0.7301 \approx 73.01\%$$

B. Langkah-langkah Matriks *Clustering* Metode *Direct Cluster Algorithm*

1. Tahap pertama, jumlahkan masing-masin *part* dan mesin.

Tabel C-19
Matriks Awal

Iterasi 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Jumlah
1	1	1		1	1	1								1	1		1	1	1		1		11
2							1	1	1	1	1	1	1										7
3							1	1	1														3
4										1	1	1	1										4
5					1	1									1			1	1		1		6
6	1	1					1	1	1	1	1	1	1	1			1						11
7			1																	1			2
8			1																	1			2
9			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		15
10			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		15
11			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		15
12			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		15
13																1							1
14																						1	1
Jumlah	2	2	6	5	6	6	7	7	7	7	7	7	7	6	6	1	2	2	2	6	6	1	

2. Urutkan mesin berdasarkan kolom "jumlah" dari yang terkecil hingga terbesar. kemudian urutkan juga untuk *part* berdasarkan baris "jumlah" dari yang terbesar hingga terkecil.

Tabel C-20
Pengurutan

Iterasi 1	7	8	9	10	11	12	13	3	5	6	14	15	20	21	4	1	2	17	18	19	16	22	Jumlah
13																					1		1
14																						1	1
7								1					1										2
8								1					1										2
3	1	1	1																				3
4				1	1	1	1																4
5									1	1		1		1					1	1			6
2	1	1	1	1	1	1	1																7
1									1	1	1	1		1	1	1	1	1	1	1			11
6	1	1	1	1	1	1	1				1					1	1	1					11
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
Jumlah	7	7	7	7	7	7	7	6	6	6	6	6	6	6	5	2	2	2	2	2	1	1	

3. Setelah di urutkan, tahap selanjutnya memposisikan angka 1 di paling atas. Caranya menggeser baris hingga tidak bisa digeser-geser lagi. Setelah tidak bisa dipindahkan lagi, maka bandingkan kolom jumlah yang sebelumnya (nomor 2), apakah jumlahnya sama atau berbeda. Bila berbeda, maka iterasi berlanjut. Jika sama, maka iterasi selesai.

Tabel C-21
Iterasi 1

Iterasi 1	7	8	9	10	11	12	13	3	5	6	14	15	20	21	4	1	2	17	18	19	16	22	Jumlah	
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	beda
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	beda
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	beda
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	beda
6	1	1	1	1	1	1	1				1					1	1	1					11	beda
2	1	1	1	1	1	1	1																7	beda
3	1	1	1																				3	beda
4				1	1	1	1																4	beda
5									1	1		1		1					1	1			6	beda
1									1	1	1	1		1	1	1	1	1	1	1			11	sama
7								1					1										2	beda
8								1					1										2	beda
13																					1		1	beda
14																						1	1	beda
Jumlah	7	7	7	7	7	7	7	6	6	6	6	6	6	6	5	2	2	2	2	2	1	1		

4. Karena berbeda, maka yang dipindahkan adalah kolom. Kolom dipindah-pindahkan hingga membentuk blok dan tidak bisa digeser-geser lagi.

Tabel C-22
Iterasi 2

Iterasi 2	7	8	9	10	11	12	13	15	5	6	14	21	4	3	20	1	2	17	18	19	16	22	Jumlah
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15
6	1	1	1	1	1	1	1				1					1	1	1					11
2	1	1	1	1	1	1	1																7
3	1	1	1																				3
4				1	1	1	1																4
5								1	1	1		1							1	1			6
1								1	1	1	1	1	1			1	1	1	1	1			11
7														1	1								2
8														1	1								2
13																					1		1
14																						1	1
Jumlah	7	7	7	7	7	7	7	6	6	6	6	6	5	6	6	2	2	2	2	2	1	1	
	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	beda	sama	beda	sama	sama	sama	sama	sama	sama	sama	

5. Karena berbeda lagi, maka yang dipindahkan lagi adalah baris.

Tabel C-23
Iterasi 3

Iterasi 3	7	8	9	10	11	12	13	15	5	6	14	21	4	3	20	1	2	17	18	19	16	22	Jumlah	
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
6	1	1	1	1	1	1	1				1					1	1	1					11	sama
2	1	1	1	1	1	1	1																7	sama
3	1	1	1																				3	sama
4				1	1	1	1																4	sama
1								1	1	1	1	1	1			1	1	1	1	1			11	beda
5								1	1	1		1							1	1			6	beda
7														1	1								2	sama
8														1	1								2	sama
13																					1		1	sama
14																						1	1	sama
Jumlah	7	7	7	7	7	7	7	6	6	6	6	6	5	6	6	2	2	2	2	2	1	1		

6. Masih ada yang berbeda, maka yang dipindahkan sekarang adalah kolom.

Tabel C-24
Iterasi 4

Iterasi 4	7	8	9	10	11	12	13	15	5	6	21	14	4	3	20	1	2	17	18	19	16	22	Jumlah	
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								15	sama
6	1	1	1	1	1	1	1					1				1	1	1					11	sama
2	1	1	1	1	1	1	1																7	sama
3	1	1	1																				3	sama
4				1	1	1	1																4	sama
1								1	1	1	1	1	1			1	1	1	1	1			11	sama
5								1	1	1	1								1	1			6	sama
7														1	1								2	sama
8														1	1								2	sama
13																					1		1	sama
14																						1	1	sama
Jumlah	7	7	7	7	7	7	7	6	6	6	6	6	5	6	6	2	2	2	2	2	1	1		
	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama	sama		

7. Setelah sudah sama semua (kolom dan baris), tentukan sel sebelum di *adjustment* dan sesudah *adjustment*.

Tabel C-25
Matriks Akhir Sebelum *Adjustment*

	7	8	9	10	11	12	13	15	5	6	21	14	4	3	20	1	2	17	18	19	16	22
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
6	1	1	1	1	1	1	1					1				1	1	1				
2	1	1	1	1	1	1	1															
3	1	1	1																			
4				1	1	1	1															
1								1	1	1	1	1	1			1	1	1	1	1		
5								1	1	1	1								1	1		
7														1	1							
8														1	1							
13																					1	
14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

$$\eta = (0.5) * \frac{108 - 0}{108 - 0 + 136} + (1 - 0.5) * \frac{(14 * 22) - 108 - 136}{(14 * 22) - 108 - 136 + 0}$$

$$\eta = 0.7213 \approx 72.13\%$$

Tabel C-26
Matriks Akhir Sesudah *Adjustment*

	7	8	9	10	11	12	13	15	5	6	21	14	4	3	20	1	2	17	18	19	16	22
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
6	1	1	1	1	1	1	1					1				1	1	1				
2	1	1	1	1	1	1	1															
3	1	1	1																			
4				1	1	1	1															
7														1	1							
8														1	1							
1								1	1	1	1	1	1			1	1	1	1	1		
5								1	1	1	1								1	1		
13																					1	
14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

$$\eta = (0.5) * \frac{95 - 13}{95 - 13 + 69} + (1 - 0.5) * \frac{(14 * 22) - 95 - 69}{(14 * 22) - 95 - 69 + 13}$$

$$\eta = 0.7301 \approx 73.01\%$$

C. Langkah-langkah Matriks *Clustering* Metode *Rank Order Clustering*

1. Tahap pertama, tulis angka 0-13 pada kolom, dan 0-21 pada baris (pada kolom bagian kiri dan baris bagian atas). Setelah itu urutan angka tersebut akan menjadi pangkat. Contoh 2^0, 2^1, 2^2, dst. Perhitungan itu dilakukan untuk baris dan kolom. Setelah dihitung semua, jumlahkan angka-angka tersebut ke masing-masing mesin atau *part* yang memiliki proses.

Tabel C-27
Iterasi 1

			21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
			2097152	1048576	524288	262144	131072	65536	32768	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1	
		Iterasi 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
8192	13	1	1	1		1	1	1								1	1		1	1	1		1		3604922
4096	12	2							1	1	1	1	1	1	1										65024
2048	11	3							1	1	1														57344
1024	10	4										1	1	1	1										7680
512	9	5					1	1									1			1	1		1		196762
256	8	6	1	1					1	1	1	1	1	1	1	1			1						3211040
128	7	7			1																	1			524292
64	6	8			1																	1			524292
32	5	9			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
16	4	10			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
8	3	11			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
4	2	12			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
2	1	13																1							64
1	0	14																						1	1
			8448	8448	252	8252	8764	8764	6460	6460	6460	5436	5436	5436	5436	8508	8764	2	8448	8704	8704	252	8764	1	

Contoh perhitungan:

Part 1 = 8192 (mesin 1) + 256 (mesin 6)

= 8448

Mesin 7 = 524288 (*part* 3) + 4 (*part* 20)

= 524292

2. Selanjutnya, urutkan bagian baris berdasarkan kolom jumlah dari yang terbesar hingga terkecil. Apabila urutan mesin dan *part* masih sama dengan iterasi sebelumnya, maka berhenti, tetapi apabila urutannya berbeda maka lanjutkan sampai urutan mesin dan *part* sama dengan iterasi sebelumnya.

Tabel C-28
Iterasi 2

	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
	2097152	1048576	524288	262144	131072	65536	32768	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1	
Iterasi 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	1	1		1	1	1								1	1		1	1	1		1		3604922
6	1	1					1	1	1	1	1	1	1	1			1						3211040
9			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
10			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
11			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
12			1	1	1	1	1	1	1	1	1	1	1	1	1					1	1		1048454
7			1																	1			524292
8			1																	1			524292
5					1	1									1			1	1		1		196762
2							1	1	1	1	1	1	1										65024
3							1	1	1														57344
4										1	1	1	1										7680
13																1							64
14																						1	1

3. Teryata hasil dari pengurutan baris menyebabkan urutan mesin dan *part* berubah. Sehingga sekarang yang diurutkan adalah kolom dari yang terbesar ke yang terkecil.

Tabel C-29
Iterasi 3

		Iterasi 3	14	1	2	17	5	6	15	21	4	18	19	7	8	9	10	11	12	13	3	20	16	22
8192	13	1	1	1	1	1	1	1	1	1	1	1	1											
4096	12	6	1	1	1	1								1	1	1	1	1	1	1				
2048	11	9	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
1024	10	10	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
512	9	11	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
256	8	12	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
128	7	7																			1	1		
64	6	8																			1	1		
32	5	5					1	1	1	1		1	1											
16	4	2												1	1	1	1	1	1	1				
8	3	3												1	1	1								
4	2	4															1	1	1	1				
2	1	13																					1	
1	0	14																						1
			16128	12288	12288	12288	12064	12064	12064	12064	12032	8224	8224	7960	7960	7960	7956	7956	7956	7956	4032	4032	2	1

4. Masih berbeda, sekarang yang harus diurutkan adalah baris.

Tabel C-30
Iterasi 4

	2097152	1048576	524288	262144	131072	65536	32768	16384	8192	4096	2048	1024	512	256	128	64	32	16	8	4	2	1	
	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
Iterasi 4	14	1	2	17	5	6	15	21	4	18	19	7	8	9	10	11	12	13	3	20	16	22	
1	1	1	1	1	1	1	1	1	1	1	1												4192256
6	1	1	1	1								1	1	1	1	1	1	1					3934192
9	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1			2353148
10	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1			2353148
11	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1			2353148
12	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1			2353148
5					1	1	1	1		1	1												251904
2												1	1	1	1	1	1	1					2032
3												1	1	1									1792
4															1	1	1	1					240
7																			1	1			12
8																			1	1			12
13																					1		2
14																						1	1

5. Masih berbeda, sekarang yang harus diurutkan adalah kolom.

Tabel C-31
Iterasi 5

8192	13	Iterasi 5	14	1	2	17	5	6	15	21	4	18	19	7	8	9	10	11	12	13	3	20	16	22
4096	12	1	1	1	1	1	1	1	1	1	1	1	1											
2048	11	6	1	1	1	1								1	1	1	1	1	1	1				
1024	10	9	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
512	9	10	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
256	8	11	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
128	7	12	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
64	6	5					1	1	1	1		1	1											
32	5	2												1	1	1	1	1	1	1				
16	4	3												1	1	1								
8	3	4															1	1	1	1				
4	2	7																			1	1		
2	1	8																			1	1		
1	0	13																					1	
		14																						1
			16128	12288	12288	12288	12160	12160	12160	12160	12032	8320	8320	8032	8032	8032	8016	8016	8016	8016	3852	3852	2	1

6. Setelah sudah sama, maka tahap selanjutnya adalah membuat matriks akhir sebelum *adjustment* dan matriks akhir sesudah *adjustment*.

Tabel C-32
Matriks Akhir Sebelum *Adjustment*

	14	1	2	17	5	6	15	21	4	18	19	7	8	9	10	11	12	13	3	20	16	22
1	1	1	1	1	1	1	1	1	1	1	1											
6	1	1	1	1								1	1	1	1	1	1	1				
9	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
10	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
11	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
12	1				1	1	1	1	1			1	1	1	1	1	1	1	1	1		
5					1	1	1	1		1	1											
2												1	1	1	1	1	1	1				
3												1	1	1								
4															1	1	1	1				
7																			1	1		
8																			1	1		
13																					1	
14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

$$\eta = (0.5) * \frac{100 - 8}{100 - 8 + 88} + (1 - 0.5) * \frac{(14 * 22) - 100 - 88}{(14 * 22) - 100 - 88 + 8}$$

$$\eta = 0.7243 \approx 72.43\%$$

Tabel C-33
Matriks Akhir Sesudah *Adjustment*

	7	8	9	10	11	12	13	14	20	5	6	15	21	4	3	1	2	17	18	19	16	22
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
2	1	1	1	1	1	1	1															
3	1	1	1																			
4				1	1	1	1															
7									1						1							
8									1						1							
6	1	1	1	1	1	1	1	1								1	1	1				
1								1		1	1	1	1	1		1	1	1	1	1		
5										1	1	1	1						1	1		
13																					1	
14																						1

- *Grouping Efficiency*

$$\eta = (w) * \frac{o - e}{o - e + v} + (1 - w) * \frac{MP - o - v}{MP - o - v + e}$$

$$\eta = (0.5) * \frac{95 - 13}{95 - 13 + 69} + (1 - 0.5) * \frac{(14 * 22) - 95 - 69}{(14 * 22) - 95 - 69 + 13}$$

$$\eta = 0.7301 \approx 73.01\%$$

Tabel C-34
Perbandingan *Grouping Efficiency*

Metode *Clustering*	% *Efficiency*	
	Sebelum	Sesudah
SLC	72.13%	73.01%
DCA	72.13%	73.01%
ROC	72.43%	73.01%

LAMPIRAN D

TABEL FREKUENSI *BY PROCESS*, *NON* DUPLIKASI, DAN OPTIMISASI

Tabel D.1
Frekuensi *By Process*

No	Aliran		Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
	Dari	Ke								p	l	t	
1	*Storage*	*Finishing*	*Handle* 75	Sub Kontrak	Dus	10	4	120	12	7.5	37.5	0.6	0.4
		Finishing	Baut *Hex* M6x35	Sub Kontrak	Plastik	30	4	120	4	13	11	5	0.2
		Finishing	Baut M6x30	Sub Kontrak	Plastik	100	7	210	3	20	14	2	0.83
		Finishing	Baut JF M5x10	Sub Kontrak	Plastik	100	6	180	2	12	10	8	0.2
		Finishing	Mur M6	Sub Kontrak	Plastik	200	14	420	3	10	10	10	0.5
		Finishing	Ring *Plat* M6	Sub Kontrak	Plastik	100	14	420	5	12	12	12	0.2
		Finishing	Ring Per M6	Sub Kontrak	Plastik	100	14	420	5	9	5	7	0.058
		Finishing	Baut M5x10	Sub Kontrak	Plastik	100	6	180	2	15	9	8	0.23
		Finishing	Ring Plat M5	Sub Kontrak	Plastik	100	8	240	3	10	10	10	0.1
		Finishing	Baut M6x10	Sub Kontrak	Plastik	100	8	240	3	20	14	2	0.35
		Meja *Quality Control*	*Handle Push* Jadul	Sub Kontrak	Dus	5	1	30	6	15	20	20	1.2
		Meja *Quality Control*	Engsel Hitam Kecil	Sub Kontrak	Dus	10	2	60	6	12	18	4	1.5
		Meja *Quality Control*	Baut M6x15 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	13	10	5	0.33
		Meja *Quality Control*	Baut M6x10 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	12	10	4.5	0.25
		Meja *Quality Control*	Mur M6	Sub Kontrak	Plastik	200	7	210	2	10	10	10	0.5
		Meja *Quality Control*	Ring *Plat* M6	Sub Kontrak	Plastik	100	7	210	3	12	12	12	0.01
		Meja *Quality Control*	Ring Per M6	Sub Kontrak	Plastik	100	7	210	3	7	5	9	0.058
2	Penyimpanan Plat	CNC	*Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		Shearing	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		Shearing	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
		CNC	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Plat	1	1	30	30	121	44	0.2	8.36
		CNC	Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	Poket	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
		CNC	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
3	CNC	*Bending* 40T	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	92.326	49.7	0.15	5.352
		Bending 40T	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	21.591	0.15	0.981
		Pencelupan	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
		Bending 30T	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2.5	5.532	0.15	0.014
		Bending 30T	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	8.192	3	0.15	0.026
		Bending 40T	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	44.438	44.438	0.15	2.307
		Bending 30T	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	38.6	7.3	0.2	0.409
		Bending 40T	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	53.763	54.584	0.15	3.373
		Bending 30T	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	21.879	16.777	0.15	0.386
		Bending 30T	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	5.621	3	0.15	0.017
		Bending 30T	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	5.44	0.15	0.208
4	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.379
		Punch 16T	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
		Punch 16T	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
		Punch 25T	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
		Punch 25T	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
		Punch 25T	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.937
		Punch 25T	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.948
5	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.375
		Bending 40T	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.319
		Bending 40T	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.325
6	*Punch* 25T	*Bending* 40T	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.934
		Bending 40T	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.934
		Bending 40T	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.921
		Bending 40T	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.939
7	*Bending* 30T	Pencelupan	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
		Pencelupan	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
		Pencelupan	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
		CO2 *Welding*	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	18.7	15	2	0.386
		CO2 *Welding*	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.2	1.7	0.15	0.017
		Pencelupan	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
8	*Bending* 40T	CO2 *Welding*	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	85.163	49.7	3.581	5.352
		CO2 *Welding*	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	17.86	2.65	0.981
		Pencelupan	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
		Pencelupan	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
		Pencelupan	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
		Pencelupan	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
		Pencelupan	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
		Pencelupan	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
		Pencelupan	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
		Pencelupan	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
		CO2 *Welding*	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	49.221	49.221	1.621	3.373

Tabel D.1
Frekuensi *By Process* (Lanjutan)

No	Aliran		Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
	Dari	Ke		p	l	t	Volume			Berat		Terpilih	Desimal	Round Up				
							h	v	Total	Kapasita	Total							
1	*Storage*	*Finishing*	Dus	7.5	37.5	0.6	1	1	1	0.4	1	1	12	12	Operator	1	12	2820
		Finishing	Plastik	13	11	5	1	1	1	0.2	1	1	4	4	Operator	1	4	940
		Finishing	Plastik	20	14	2	1	1	1	0.83	1	1	3	3	Operator	1	3	705
		Finishing	Plastik	12	10	8	1	1	1	0.2	1	1	2	2	Operator	1	2	470
		Finishing	Plastik	10	10	10	1	1	1	0.5	1	1	3	3	Operator	1	3	705
		Finishing	Plastik	12	12	12	1	1	1	0.2	1	1	5	5	Operator	1	5	1175
		Finishing	Plastik	9	5	7	1	1	1	0.058	1	1	5	5	Operator	1	5	1175
		Finishing	Plastik	15	9	8	1	1	1	0.23	1	1	2	2	Operator	1	2	470
		Finishing	Plastik	10	10	10	1	1	1	0.1	1	1	3	3	Operator	1	3	705
		Finishing	Plastik	20	14	2	1	1	1	0.35	1	1	3	3	Operator	1	3	705
		Meja *Quality Control*	Dus	15	20	20	1	1	1	1.2	1	1	6	6	Operator	1	6	1410
		Meja *Quality Control*	Dus	12	18	4	1	1	1	1.5	1	1	6	6	Operator	1	6	1410
		Meja *Quality Control*	Plastik	13	10	5	1	1	1	0.33	1	1	1	1	Operator	1	1	235
		Meja *Quality Control*	Plastik	12	10	4.5	1	1	1	0.25	1	1	1	1	Operator	1	1	235
		Meja *Quality Control*	Plastik	10	10	10	1	1	1	0.5	1	1	2	2	Operator	1	2	470
		Meja *Quality Control*	Plastik	12	12	12	1	1	1	0.01	1	1	3	3	Operator	1	3	705
		Meja *Quality Control*	Plastik	7	5	9	1	1	1	0.058	1	1	3	3	Operator	1	3	705
2	Penyimpanan Plat	CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		Shearing	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	119	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
		CNC	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
3	CNC	*Bending* 40T	Keranjang	100	80	50	1	333	333	40	7	7	4.286	5	*Handtrolley*	1	5	1175
		Bending 40T	Keranjang	100	80	50	6	333	1998	40	40	40	0.75	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	16	333	5328	40	100	100	0.3	1	*Handtrolley*	1	1	235
		Bending 30T	Keranjang	100	80	50	560	333	186480	40	2857	2857	0.011	1	*Handtrolley*	1	1	235
		Bending 30T	Keranjang	100	80	50	312	333	103896	40	1538	1538	0.020	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	2	333	666	40	17	17	1.765	2	*Handtrolley*	1	2	470
		Bending 30T	Keranjang	100	80	50	20	250	5000	40	97	97	0.309	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	1	333	333	40	11	11	2.727	3	*Handtrolley*	1	3	705
		Bending 30T	Keranjang	100	80	50	16	333	5328	40	103	103	0.291	1	*Handtrolley*	1	1	235
		Bending 30T	Keranjang	100	80	50	442	333	147186	40	2352	2352	0.013	1	*Handtrolley*	1	1	235
		Bending 30T	Keranjang	100	80	50	42	333	13986	40	192	192	0.156	1	*Handtrolley*	1	1	235
4	*Shearing*	*Punch* 16T	Keranjang	100	80	50	10	384	3840	40	105	105	0.286	1	*Handtrolley*	1	1	235
		Punch 16T	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
		Punch 16T	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
		Punch 25T	Keranjang	100	80	50	6	384	2304	40	41	41	0.732	1	*Handtrolley*	1	1	235
		Punch 25T	Keranjang	100	80	50	6	384	2304	40	41	41	0.732	1	*Handtrolley*	1	1	235
		Punch 25T	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Punch 25T	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
5	*Punch* 16T	*Bending* 40T	Keranjang	100	80	50	10	384	3840	40	106	106	0.283	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	22	384	8448	40	125	125	0.24	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	22	384	8448	40	123	123	0.244	1	*Handtrolley*	1	1	235
6	*Punch* 25T	*Bending* 40T	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	6	384	2304	40	43	43	0.698	1	*Handtrolley*	1	1	235
		Bending 40T	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
7	*Bending* 30T	Pencelupan	Keranjang	100	80	50	1000	23	23000	40	2857	2857	0.011	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	660	30	19800	40	1538	1538	0.020	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	42	10	420	40	97	97	0.309	1	*Handtrolley*	1	1	235
		CO2 *Welding*	Keranjang	100	80	50	25	25	625	40	103	103	0.291	1	*Handtrolley*	1	1	235
		CO2 *Welding*	Keranjang	100	80	50	1081	333	359973	40	2352	2352	0.013	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	78	36	2808	40	192	192	0.156	1	*Handtrolley*	1	1	235
8	*Bending* 40T	CO2 *Welding*	Keranjang	100	80	50	1	13	13	40	7	7	4.286	5	*Handtrolley*	1	5	1175
		CO2 *Welding*	Keranjang	100	80	50	8	18	144	40	40	40	0.75	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	30	18	540	40	106	106	0.283	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	32	18	576	40	125	125	0.24	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	32	18	576	40	123	123	0.244	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	6	31	186	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	6	31	186	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	6	50	300	40	43	43	0.698	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	6	50	300	40	42	42	0.714	1	*Handtrolley*	1	1	235
		Pencelupan	Keranjang	100	80	50	2	26	52	40	17	17	1.765	2	*Handtrolley*	1	2	470
		CO2 *Welding*	Keranjang	100	80	50	2	30	60	40	11	11	2.727	3	*Handtrolley*	1	3	705

Tabel D.1
Frekuensi *By Process* (Lanjutan 1)

No	Aliran		Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
	Dari	Ke								p	l	t	
9	CO2 *Welding*	Gurinda	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
		Gurinda	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
10	Gurinda	Pencelupan	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
		Pencelupan	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
11	Pencelupan	*Handspray*	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
		Handspray	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
		Handspray	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
		Handspray	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
		Handspray	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
		Handspray	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
		Handspray	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
		Handspray	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
		Handspray	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
		Handspray	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
		Handspray	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
		Handspray	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
		Handspray	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
		Handspray	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
		Handspray	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
12	*Handspray*	*Oven*	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
		Oven	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
		Oven	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
		Oven	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
		Oven	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
		Oven	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
		Oven	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
		Oven	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Oven	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Oven	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
		Oven	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
		Oven	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
		Oven	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
		Oven	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
		Oven	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
13	*Oven*	Meja Inspeksi	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
		Meja Inspeksi	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
		Meja Inspeksi	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
		Meja Inspeksi	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
		Meja Inspeksi	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
		Meja Inspeksi	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
		Meja Inspeksi	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
		Meja Inspeksi	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Meja Inspeksi	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Meja Inspeksi	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
		Meja Inspeksi	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
		Meja Inspeksi	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
		Meja Inspeksi	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
		Meja Inspeksi	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
		Meja Inspeksi	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
14	Meja Inspeksi	*Finishing*	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
		Finishing	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
		Finishing	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
		Finishing	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
		Finishing	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
		Finishing	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
		Finishing	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
		Finishing	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Finishing	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
		Finishing	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
		Finishing	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
		Finishing	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
		Finishing	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
		Meja *Quality Control*	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
		Meja *Quality Control*	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
15	*Finishing*	Meja *Quality Control*	*Assembly* 1		Unit	1	1	30	30	50	50	20	14.367
16	Meja *Quality Control*	Tempat Penyimpanan	*Box Panel Wall Mounting*		Unit	1	1	30	30	50	50	20	15

Tabel D.1
Frekuensi *By Process* (Lanjutan 1)

No	Aliran		Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
	Dari	Ke		p	l	t	Volume			Berat		Terpilih	Desimal	Round Up				
							h	v	Total	Kapasita	Total							
9	CO2 *Welding*	Gurinda	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handpallet*	1	15	3525
		Gurinda	Pallet	100	80	20	2	12	24	60	148	24	1.25	2	*Handpallet*	1	2	470
10	Gurinda	Pencelupan	Keranjang	100	80	50	2	2	4	40	6	4	7.5	8	*Handtrolley*	1	8	1880
		Pencelupan	Keranjang	100	80	50	2	30	60	40	99	60	0.5	1	*Handtrolley*	1	1	235
11	Pencelupan	*Handspray*	*Hanger*	200	30	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
		Handspray	*Hanger*	200	30	150	5	1	5	10	25	5	6	6	*Hanger*	30	0.2	47
		Handspray	*Hanger*	200	30	150	100	1	100	10	714	100	0.3	1	*Hanger*	30	0.033	8
		Handspray	*Hanger*	200	30	150	44	1	44	10	384	44	0.682	1	*Hanger*	30	0.033	8
		Handspray	*Hanger*	200	30	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	31	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	7	1	7	10	24	7	4.286	5	*Hanger*	30	0.167	40
		Handspray	*Hanger*	200	30	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
		Handspray	*Hanger*	200	30	150	6	1	6	10	48	6	5	5	*Hanger*	30	0.167	40
12	*Handspray*	*Oven*	*Hanger*	200	30	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
		Oven	*Hanger*	200	30	150	5	1	5	10	24	5	6	6	*Hanger*	30	0.2	47
		Oven	*Hanger*	200	30	150	100	1	100	10	555	100	0.3	1	*Hanger*	30	0.033	8
		Oven	*Hanger*	200	30	150	44	1	44	10	333	44	0.682	1	*Hanger*	30	0.033	8
		Oven	*Hanger*	200	30	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	7	1	7	10	24	7	4.286	5	*Hanger*	30	0.167	40
		Oven	*Hanger*	200	30	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
		Oven	*Hanger*	200	30	150	6	1	6	10	47	6	5	5	*Hanger*	30	0.167	40
13	*Oven*	Meja Inspeksi	Meja	250	150	100	15	5	75	50	7	7	4.286	5	*Handtrolley*	1	5	1175
		Meja Inspeksi	Meja	250	150	100	90	666	59940	50	123	123	0.244	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	4625	47	217375	50	2777	2777	0.011	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	3135	60	188100	50	1666	1666	0.018	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	145	37	5365	50	131	131	0.229	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	150	37	5550	50	154	154	0.195	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	150	37	5550	50	151	151	0.199	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	30	62	1860	50	53	53	0.566	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	30	62	1860	50	53	53	0.566	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	30	100	3000	50	54	54	0.556	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	30	100	3000	50	53	53	0.566	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	18	53	954	50	21	21	1.429	2	*Handtrolley*	1	2	470
		Meja Inspeksi	Meja	250	150	100	234	20	4680	50	121	121	0.248	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	15	61	915	50	122	122	0.246	1	*Handtrolley*	1	1	235
		Meja Inspeksi	Meja	250	150	100	350	73	25550	50	235	235	0.128	1	*Handtrolley*	1	1	235
14	Meja Inspeksi	*Finishing*	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handtrolley*	1	15	3525
		Finishing	Pallet	100	80	20	16	133	2128	60	148	148	0.203	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	1000	9	9000	60	3333	3333	0.009	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	660	12	7920	60	2000	2000	0.015	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	30	7	210	60	158	158	0.190	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	32	7	224	60	185	185	0.162	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	32	7	224	60	182	182	0.165	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	6	12	72	60	63	63	0.476	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	6	12	72	60	63	63	0.476	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	6	20	120	60	64	64	0.46875	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	6	20	120	60	63	63	0.47619	1	*Handtrolley*	1	1	235
		Finishing	Pallet	100	80	20	2	10	20	60	25	20	1.5	2	*Handtrolley*	1	2	470
		Finishing	Pallet	100	80	20	42	4	168	60	145	145	0.207	1	*Handtrolley*	1	1	235
		Meja *Quality Control*	Pallet	100	80	20	2	12	24	60	147	24	1.25	2	*Handtrolley*	1	2	470
		Meja *Quality Control*	Pallet	100	80	20	78	14	1092	60	283	283	0.106	1	*Handtrolley*	1	1	235
15	*Finishing*	Meja *Quality Control*	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525
16	Meja *Quality Control*	Tempat Penyimpanan	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525

Tabel D.2
Frekuensi *Non* Duplikasi

No	Sel	Aliran		Sel	Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
		Dari	Ke									p	l	t	
1	-	*Storage*	*Finishing*	3	*Handle* 75	Sub Kontrak	Dus	10	4	120	12	7.5	37.5	0.6	0.4
	-		*Finishing*	3	Baut *Hex* M6x35	Sub Kontrak	Plastik	30	4	120	4	13	11	5	0.2
	-		*Finishing*	3	Baut M6x30	Sub Kontrak	Plastik	100	7	210	3	20	14	2	0.83
	-		*Finishing*	3	Baut JF M5x10	Sub Kontrak	Plastik	100	6	180	2	12	10	8	0.2
	-		*Finishing*	3	Mur M6	Sub Kontrak	Plastik	200	14	420	3	10	10	10	0.5
	-		*Finishing*	3	Ring *Plat* M6	Sub Kontrak	Plastik	100	14	420	5	12	12	12	0.2
	-		*Finishing*	3	Ring Per M6	Sub Kontrak	Plastik	100	14	420	5	9	5	7	0.058
	-		*Finishing*	3	Baut M5x10	Sub Kontrak	Plastik	100	6	180	2	15	9	8	0.23
	-		*Finishing*	3	Ring Plat M5	Sub Kontrak	Plastik	100	8	240	3	10	10	10	0.1
	-		*Finishing*	3	Baut M6x10	Sub Kontrak	Plastik	100	8	240	3	20	14	2	0.35
	-		Meja *Quality Control*	3	*Handle Push* Jadul	Sub Kontrak	Dus	5	1	30	6	15	20	20	1.2
	-		Meja *Quality Control*	3	Engsel Hitam Kecil	Sub Kontrak	Dus	10	2	60	6	12	18	4	1.5
	-		Meja *Quality Control*	3	Baut M6x15 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	13	10	5	0.33
	-		Meja *Quality Control*	3	Baut M6x10 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	12	10	4.5	0.25
	-		Meja *Quality Control*	3	Mur M6	Sub Kontrak	Plastik	200	7	210	2	10	10	10	0.5
	-		Meja *Quality Control*	3	Ring *Plat* M6	Sub Kontrak	Plastik	100	7	210	3	12	12	12	0.01
	-		Meja *Quality Control*	3	Ring Per M6	Sub Kontrak	Plastik	100	7	210	3	7	5	9	0.058
2	-	Penyimpanan Plat	CNC	2	*Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		CNC	2	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Plat	1	1	30	30	121	44	0.2	8.36
	-		CNC	2	Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Poket	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
3	2	CNC	*Bending* 40T	1	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	92.326	49.7	0.15	5.352
	2		*Bending* 40T	1	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	21.591	0.15	0.981
	2		Pencelupan	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
	2		*Bending* 30T	2	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2.5	5.532	0.15	0.014
	2		*Bending* 30T	2	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	8.192	3	0.15	0.026
	2		*Bending* 40T	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	44.438	44.438	0.15	2.307
	2		*Bending* 30T	2	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	38.6	7.3	0.2	0.409
	2		*Bending* 40T	1	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	53.763	54.584	0.15	3.373
	2		*Bending* 30T	2	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	21.879	16.777	0.15	0.386
	2		*Bending* 30T	2	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	5.621	3	0.15	0.017
	2		*Bending* 30T	2	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	5.44	0.15	0.208
4	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.379
	1		*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
	1		*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
	1		*Punch* 25T	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Punch* 25T	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Punch* 25T	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.937
	1		*Punch* 25T	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.948
5	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.375
	1		*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.319
	1		*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.325
6	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.934
	1		*Bending* 40T	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.934
	1		*Bending* 40T	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.921
	1		*Bending* 40T	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.939
7	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
	2		Pencelupan	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
	2		Pencelupan	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
	2		CO2 *Welding*	1	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	18.7	15	2	0.386
	2		CO2 *Welding*	1	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.2	1.7	0.15	0.017
	2		Pencelupan	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
8	1	*Bending* 40T	CO2 *Welding*	1	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	85.163	49.7	3.581	5.352
	1		CO2 *Welding*	1	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	17.86	2.65	0.981
	1		Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
	1		Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
	1		Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
	1		Pencelupan	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		Pencelupan	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		Pencelupan	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
	1		Pencelupan	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
	1		Pencelupan	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
	1		CO2 *Welding*	1	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	49.221	49.221	1.621	3.373

Tabel D.2
Frekuensi *Non* Duplikasi (Lanjutan)

No	Sel	Aliran		Sel	Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
		Dari	Ke			p	l	t	Volume			Berat		Terpilih	Desimal	Round Up				
									h	v	Total	Kapasita	Total							
	-		*Finishing*	3	Dus	7.5	37.5	0.6	1	1	1	0.4	1	1	12	12	Operator	1	12	2820
	-		*Finishing*	3	Plastik	13	11	5	1	1	1	0.2	1	1	4	4	Operator	1	4	940
	-		*Finishing*	3	Plastik	20	14	2	1	1	1	0.83	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	12	10	8	1	1	1	0.2	1	1	2	2	Operator	1	2	470
	-		*Finishing*	3	Plastik	10	10	10	1	1	1	0.5	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	12	12	12	1	1	1	0.2	1	1	5	5	Operator	1	5	1175
	-		*Finishing*	3	Plastik	9	5	7	1	1	1	0.058	1	1	5	5	Operator	1	5	1175
	-		*Finishing*	3	Plastik	15	9	8	1	1	1	0.23	1	1	2	2	Operator	1	2	470
1	-	*Storage*	*Finishing*	3	Plastik	10	10	10	1	1	1	0.1	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	20	14	2	1	1	1	0.35	1	1	3	3	Operator	1	3	705
	-		Meja *Quality Control*	3	Dus	15	20	20	1	1	1	1.2	1	1	6	6	Operator	1	6	1410
	-		Meja *Quality Control*	3	Dus	12	18	4	1	1	1	1.5	1	1	6	6	Operator	1	6	1410
	-		Meja *Quality Control*	3	Plastik	13	10	5	1	1	1	0.33	1	1	1	1	Operator	1	1	235
	-		Meja *Quality Control*	3	Plastik	12	10	4.5	1	1	1	0.25	1	1	1	1	Operator	1	1	235
	-		Meja *Quality Control*	3	Plastik	10	10	10	1	1	1	0.5	1	1	2	2	Operator	1	2	470
	-		Meja *Quality Control*	3	Plastik	12	12	12	1	1	1	0.01	1	1	3	3	Operator	1	3	705
	-		Meja *Quality Control*	3	Plastik	7	5	9	1	1	1	0.058	1	1	3	3	Operator	1	3	705
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
2	-	Penyimpanan Plat	*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	119	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	2		*Bending* 40T	1	Keranjang	100	80	50	1	333	333	40	7	7	4.286	5	*Handtrolley*	1	5	1175
	2		*Bending* 40T	1	Keranjang	100	80	50	6	333	1998	40	40	40	0.75	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	16	333	5328	40	100	100	0.3	1	*Handtrolley*	1	1	235
	2		*Bending* 30T	2	Keranjang	100	80	50	560	333	186480	40	2857	2857	0.011	1	*Handtrolley*	1	1	235
	2		*Bending* 30T	2	Keranjang	100	80	50	312	333	103896	40	1538	1538	0.020	1	*Handtrolley*	1	1	235
3	2	CNC	*Bending* 40T	1	Keranjang	100	80	50	2	333	666	40	17	17	1.765	2	*Handtrolley*	1	2	470
	2		*Bending* 30T	2	Keranjang	100	80	50	20	250	5000	40	97	97	0.309	1	*Handtrolley*	1	1	235
	2		*Bending* 40T	1	Keranjang	100	80	50	1	333	333	40	11	11	2.727	3	*Handtrolley*	1	3	705
	2		*Bending* 30T	2	Keranjang	100	80	50	16	333	5328	40	103	103	0.291	1	*Handtrolley*	1	1	235
	2		*Bending* 30T	2	Keranjang	100	80	50	442	333	147186	40	2352	2352	0.013	1	*Handtrolley*	1	1	235
	2		*Bending* 30T	2	Keranjang	100	80	50	42	333	13986	40	192	192	0.156	1	*Handtrolley*	1	1	235
	1		*Punch* 16T	1	Keranjang	100	80	50	10	384	3840	40	105	105	0.286	1	*Handtrolley*	1	1	235
	1		*Punch* 16T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
	1		*Punch* 16T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
4	1	*Shearing*	*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.732	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.732	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
5	1		*Bending* 40T	1	Keranjang	100	80	50	10	384	3840	40	106	106	0.283	1	*Handtrolley*	1	1	235
	1	*Punch* 16T	*Bending* 40T	1	Keranjang	100	80	50	22	384	8448	40	125	125	0.24	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	22	384	8448	40	123	123	0.244	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
6	1	*Punch* 25T	*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	43	43	0.698	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.714	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	1000	23	23000	40	2857	2857	0.011	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	660	30	19800	40	1538	1538	0.020	1	*Handtrolley*	1	1	235
7	2	*Bending* 30T	Pencelupan	1	Keranjang	100	80	50	42	10	420	40	97	97	0.309	1	*Handtrolley*	1	1	235
	2		CO2 *Welding*	1	Keranjang	100	80	50	25	25	625	40	103	103	0.291	1	*Handtrolley*	1	1	235
	2		CO2 *Welding*	1	Keranjang	100	80	50	1081	333	359973	40	2352	2352	0.013	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	78	36	2808	40	192	192	0.156	1	*Handtrolley*	1	1	235
	1		CO2 *Welding*	1	Keranjang	100	80	50	1	13	13	40	7	7	4.286	5	*Handtrolley*	1	5	1175
	1		CO2 *Welding*	1	Keranjang	100	80	50	8	18	144	40	40	40	0.75	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	30	18	540	40	106	106	0.283	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	32	18	576	40	125	125	0.24	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	32	18	576	40	123	123	0.244	1	*Handtrolley*	1	1	235
8	1	*Bending* 40T	Pencelupan	1	Keranjang	100	80	50	6	31	186	40	42	42	0.714	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	31	186	40	42	42	0.714	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	50	300	40	43	43	0.698	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	50	300	40	42	42	0.714	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	2	26	52	40	17	17	1.765	2	*Handtrolley*	1	2	470
	1		CO2 *Welding*	1	Keranjang	100	80	50	2	30	60	40	11	11	2.727	3	*Handtrolley*	1	3	705

Tabel D.2
Frekuensi *Non* Duplikasi (Lanjutan 1)

No	Sel	Aliran		Sel	Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
		Dari	Ke									p	l	t	
9	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		Gurinda	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
10	1	Gurinda	Pencelupan	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		Pencelupan	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
11	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		*Handspray*	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
	1		*Handspray*	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
	1		*Handspray*	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
	1		*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
	1		*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
	1		*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
	1		*Handspray*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		*Handspray*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		*Handspray*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
	1		*Handspray*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
	1		*Handspray*	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
	1		*Handspray*	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
	1		*Handspray*	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
	1		*Handspray*	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
12	1	*Handspray*	*Oven*	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		*Oven*	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		*Oven*	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		*Oven*	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		*Oven*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Oven*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Oven*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		*Oven*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		*Oven*	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		*Oven*	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		*Oven*	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		*Oven*	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
13	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		Meja Inspeksi	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		Meja Inspeksi	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		Meja Inspeksi	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		Meja Inspeksi	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		Meja Inspeksi	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		Meja Inspeksi	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
14	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		*Finishing*	3	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		*Finishing*	3	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		*Finishing*	3	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		*Finishing*	3	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Finishing*	3	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Finishing*	3	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		*Finishing*	3	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		*Finishing*	3	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		*Finishing*	3	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		Meja *Quality Control*	3	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		Meja *Quality Control*	3	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
15	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1		Unit	1	1	30	30	50	50	20	14.367
16	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*		Unit	1	1	30	30	50	50	20	15

Tabel D.2
Frekuensi *Non* Duplikasi (Lanjutan 1)

No	Sel	Aliran		Sel	Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
									Volume			Berat								
		Dari	Ke			p	l	t	h	v	Total	Kapasita	Total	Terpilih	Desimal	Round Up				
9	1	CO2 *Welding*	Gurinda	1	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handpallet*	1	15	3525
	1		Gurinda	1	Pallet	100	80	20	2	12	24	60	148	24	1.25	2	*Handpallet*	1	2	470
10	1	Gurinda	Pencelupan	1	Keranjang	100	80	50	2	2	4	40	6	4	7.5	8	*Handtrolley*	1	8	1880
	1		Pencelupan	1	Keranjang	100	80	50	2	30	60	40	99	60	0.5	1	*Handtrolley*	1	1	235
11	1	Pencelupan	*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
	1		*Handspray*	1	*Hanger*	200	1	150	5	1	5	10	25	5	6	6	*Hanger*	30	0.2	47
	1		*Handspray*	1	*Hanger*	200	1	150	100	1	100	10	714	100	0.3	1	*Hanger*	30	0.033	8
	1		*Handspray*	1	*Hanger*	200	1	150	44	1	44	10	384	44	0.68182	1	*Hanger*	30	0.033	8
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	31	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	7	1	7	10	24	7	4.28571	5	*Hanger*	30	0.167	40
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	6	1	6	10	48	6	5	5	*Hanger*	30	0.167	40
12	1	*Handspray*	*Oven*	1	*Hanger*	200	1	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
	1		*Oven*	1	*Hanger*	200	1	150	5	1	5	10	24	5	6	6	*Hanger*	30	0.2	47
	1		*Oven*	1	*Hanger*	200	1	150	100	1	100	10	555	100	0.3	1	*Hanger*	30	0.033	8
	1		*Oven*	1	*Hanger*	200	1	150	44	1	44	10	333	44	0.68182	1	*Hanger*	30	0.033	8
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	7	1	7	10	24	7	4.28571	5	*Hanger*	30	0.167	40
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	6	1	6	10	47	6	5	5	*Hanger*	30	0.167	40
13	1	*Oven*	Meja Inspeksi	1	Meja	250	150	100	15	5	75	50	7	7	4.286	5	*Handtrolley*	1	5	1175
	1		Meja Inspeksi	1	Meja	250	150	100	90	666	59940	50	123	123	0.244	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	4625	47	217375	50	2777	2777	0.011	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	3135	60	188100	50	1666	1666	0.018	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	145	37	5365	50	131	131	0.229	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	150	37	5550	50	154	154	0.195	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	150	37	5550	50	151	151	0.199	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	62	1860	50	53	53	0.566	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	62	1860	50	53	53	0.566	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	100	3000	50	54	54	0.556	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	100	3000	50	53	53	0.566	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	18	53	954	50	21	21	1.429	2	*Handtrolley*	1	2	470
	1		Meja Inspeksi	1	Meja	250	150	100	234	20	4680	50	121	121	0.248	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	15	61	915	50	122	122	0.246	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	350	73	25550	50	235	235	0.128	1	*Handtrolley*	1	1	235
14	1	Meja Inspeksi	*Finishing*	3	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handtrolley*	1	15	3525
	1		*Finishing*	3	Pallet	100	80	20	16	133	2128	60	148	148	0.203	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	1000	9	9000	60	3333	3333	0.009	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	660	12	7920	60	2000	2000	0.015	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	30	7	210	60	158	158	0.190	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	32	7	224	60	185	185	0.162	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	32	7	224	60	182	182	0.165	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	12	72	60	63	63	0.476	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	12	72	60	63	63	0.476	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	20	120	60	64	64	0.46875	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	20	120	60	63	63	0.47619	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	2	10	20	60	25	20	1.5	2	*Handtrolley*	1	2	470
	1		*Finishing*	3	Pallet	100	80	20	42	4	168	60	145	145	0.207	1	*Handtrolley*	1	1	235
	1		Meja *Quality Control*	3	Pallet	100	80	20	2	12	24	60	147	24	1.25	2	*Handtrolley*	1	2	470
	1		Meja *Quality Control*	3	Pallet	100	80	20	78	14	1092	60	283	283	0.106	1	*Handtrolley*	1	1	235
15	3	*Finishing*	Meja *Quality Control*	3	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525
16	3	Meja *Quality Control*	Tempat Penyimpanan	-	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525

Tabel D.3
Frekuensi Optimisasi

No	Sel	Aliran		Sel	Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
		Dari	Ke									p	l	t	
1	-	*Storage*	*Finishing*	3	*Handle* 75	Sub Kontrak	Dus	10	4	120	12	7.5	37.5	0.6	0.4
	-		*Finishing*	3	Baut *Hex* M6x35	Sub Kontrak	Plastik	30	4	120	4	13	11	5	0.2
	-		*Finishing*	3	Baut M6x30	Sub Kontrak	Plastik	100	7	210	3	20	14	2	0.83
	-		*Finishing*	3	Baut JF M5x10	Sub Kontrak	Plastik	100	6	180	2	12	10	8	0.2
	-		*Finishing*	3	Mur M6	Sub Kontrak	Plastik	200	14	420	3	10	10	10	0.5
	-		*Finishing*	3	Ring *Plat* M6	Sub Kontrak	Plastik	100	14	420	5	12	12	12	0.2
	-		*Finishing*	3	Ring Per M6	Sub Kontrak	Plastik	100	14	420	5	9	5	7	0.058
	-		*Finishing*	3	Baut M5x10	Sub Kontrak	Plastik	100	6	180	2	15	9	8	0.23
	-		*Finishing*	3	Ring Plat M5	Sub Kontrak	Plastik	100	8	240	3	10	10	10	0.1
	-		*Finishing*	3	Baut M6x10	Sub Kontrak	Plastik	100	8	240	3	20	14	2	0.35
	-		Meja *Quality Control*	3	*Handle Push* Jadul	Sub Kontrak	Dus	5	1	30	6	15	20	20	1.2
	-		Meja *Quality Control*	3	Engsel Hitam Kecil	Sub Kontrak	Dus	10	2	60	6	12	18	4	1.5
	-		Meja *Quality Control*	3	Baut M6x15 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	13	10	5	0.33
	-		Meja *Quality Control*	3	Baut M6x10 Multifungsi	Sub Kontrak	Plastik	100	2	60	1	12	10	4.5	0.25
	-		Meja *Quality Control*	3	Mur M6	Sub Kontrak	Plastik	200	7	210	2	10	10	10	0.5
	-		Meja *Quality Control*	3	Ring *Plat* M6	Sub Kontrak	Plastik	100	7	210	3	12	12	12	0.01
	-		Meja *Quality Control*	3	Ring Per M6	Sub Kontrak	Plastik	100	7	210	3	7	5	9	0.058
2	-	Penyimpanan Plat	CNC	2	*Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC (Dup)	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC (Dup)	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC (Dup)	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		*Shearing*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Plat	1	1	30	30	240	122	0.13	29.88
	-		CNC (Dup)	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC (Dup)	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Plat	1	1	30	30	121	44	0.2	8.36
	-		CNC	2	Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Poket	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC	2	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
	-		CNC (Dup)	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Plat	1	1	30	30	240	122	0.15	34.48
3	2	CNC	*Bending* 40T	1	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	92.326	49.7	0.15	5.352
	2		*Bending* 40T	1	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	21.591	0.15	0.981
	2		*Bending* 40T	1	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	53.763	54.584	0.15	3.373
	2		*Bending* 30T	2	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	21.879	16.777	0.15	0.386
	2		*Bending* 30T	2	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	5.621	3	0.15	0.017
4	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	44.438	44.438	0.15	2.307
	1		*Bending* 30T	2	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2.5	5.532	0.15	0.014
	1		*Bending* 30T	2	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	8.1919	3	0.15	0.026
	1		*Bending* 30T	2	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	38.6	7.3	0.2	0.409
	1		*Bending* 30T	2	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	5.44	0.15	0.208
	1		Pencelupan	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
5	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.379
	1		*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
	1		*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
	1		*Punch* 25T	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Punch* 25T	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Punch* 25T	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.937
	1		*Punch* 25T	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.948
6	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	51.362	7.362	0.13	0.379
	1		*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
	1		*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	7.202	0.13	0.331
7	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Bending* 40T	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.176	0.13	0.957
	1		*Bending* 40T	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.937
	1		*Bending* 40T	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.8	23.079	0.13	0.948
8	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
	2		Pencelupan	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
	2		Pencelupan	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
	2		CO2 *Welding*	1	Poket	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	18.7	15	2	0.386
	2		CO2 *Welding*	1	Kait Gembok Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.2	1.7	0.15	0.017
	2		Pencelupan	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
9	1	*Bending* 40T	CO2 *Welding*	1	*Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	85.163	49.7	3.581	5.352
	1		CO2 *Welding*	1	*Body* Atas Bawah	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	50	17.86	2.65	0.981
	1		Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
	1		Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
	1		Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
	1		Pencelupan	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		Pencelupan	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		Pencelupan	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
	1		Pencelupan	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
	1		Pencelupan	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
	1		CO2 *Welding*	1	Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	49.221	49.221	1.621	3.373

Tabel D.3
Frekuensi Optimisasi (Lanjutan)

No	Sel	Aliran		Sel	Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
		Dari	Ke			p	l	t	Volume			Berat		Terpilih	Desimal	Round Up				
									h	v	Total	Kapasita	Total							
1	-	*Storage*	*Finishing*	3	Dus	7.5	37.5	0.6	1	1	1	0.4	1	1	12	12	Operator	1	12	2820
	-		*Finishing*	3	Plastik	13	11	5	1	1	1	0.2	1	1	4	4	Operator	1	4	940
	-		*Finishing*	3	Plastik	20	14	2	1	1	1	0.83	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	12	10	8	1	1	1	0.2	1	1	2	2	Operator	1	2	470
	-		*Finishing*	3	Plastik	10	10	10	1	1	1	0.5	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	12	12	12	1	1	1	0.2	1	1	5	5	Operator	1	5	1175
	-		*Finishing*	3	Plastik	9	5	7	1	1	1	0.058	1	1	5	5	Operator	1	5	1175
	-		*Finishing*	3	Plastik	15	9	8	1	1	1	0.23	1	1	2	2	Operator	1	2	470
	-		*Finishing*	3	Plastik	10	10	10	1	1	1	0.1	1	1	3	3	Operator	1	3	705
	-		*Finishing*	3	Plastik	20	14	2	1	1	1	0.35	1	1	3	3	Operator	1	3	705
	-		Meja *Quality Control*	3	Dus	15	20	20	1	1	1	1.2	1	1	6	6	Operator	1	6	1410
	-		Meja *Quality Control*	3	Dus	12	18	4	1	1	1	1.5	1	1	6	6	Operator	1	6	1410
	-		Meja *Quality Control*	3	Plastik	13	10	5	1	1	1	0.33	1	1	1	1	Operator	1	1	235
	-		Meja *Quality Control*	3	Plastik	12	10	4.5	1	1	1	0.25	1	1	1	1	Operator	1	1	235
	-		Meja *Quality Control*	3	Plastik	10	10	10	1	1	1	0.5	1	1	2	2	Operator	1	2	470
	-		Meja *Quality Control*	3	Plastik	12	12	12	1	1	1	0.01	1	1	3	3	Operator	1	3	705
	-		Meja *Quality Control*	3	Plastik	7	5	9	1	1	1	0.058	1	1	3	3	Operator	1	3	705
2	-	Penyimpanan Plat	CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		*Shearing*	1	*Handlift*	138	80.5	208	1	5	5	1000	33	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	119	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC	2	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
	-		CNC (Dup)	1	*Handlift*	138	80.5	208	1	5	5	1000	29	5	6	6	*Handlift*	1	6	1410
3	2	CNC	*Bending* 40T	1	Keranjang	100	80	50	1	333	333	40	7	7	4.28571	5	*Handtrolley*	1	5	1175
	2		*Bending* 40T	1	Keranjang	100	80	50	6	333	1998	40	40	40	0.75	1	*Handtrolley*	1	1	235
	2		*Bending* 40T	1	Keranjang	100	80	50	1	333	333	40	11	11	2.72727	3	*Handtrolley*	1	3	705
	2		*Bending* 30T	2	Keranjang	100	80	50	16	333	5328	40	103	103	0.29126	1	*Handtrolley*	1	1	235
	2		*Bending* 30T	2	Keranjang	100	80	50	442	333	147186	40	2352	2352	0.01276	1	*Handtrolley*	1	1	235
4	1	CNC (Dup)	*Bending* 40T	1	Keranjang	100	80	50	2	333	666	40	17	17	1.76471	2	*Handtrolley*	1	2	470
	1		*Bending* 30T	2	Keranjang	100	80	50	560	333	186480	40	2857	2857	0.0105	1	*Handtrolley*	1	1	235
	1		*Bending* 30T	2	Keranjang	100	80	50	312	333	103896	40	1538	1538	0.01951	1	*Handtrolley*	1	1	235
	1		*Bending* 30T	2	Keranjang	100	80	50	20	250	5000	40	97	97	0.30928	1	*Handtrolley*	1	1	235
	1		*Bending* 30T	2	Keranjang	100	80	50	42	333	13986	40	192	192	0.15625	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	16	333	5328	40	100	100	0.3	1	*Handtrolley*	1	1	235
5	1	*Shearing*	*Punch* 16T	1	Keranjang	100	80	50	10	384	3840	40	105	105	0.28571	1	*Handtrolley*	1	1	235
	1		*Punch* 16T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
	1		*Punch* 16T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.73171	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.73171	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.71429	1	*Handtrolley*	1	1	235
	1		*Punch* 25T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.71429	1	*Handtrolley*	1	1	235
6	1	*Punch* 16T	*Bending* 40T	1	Keranjang	100	80	50	10	384	3840	40	105	105	0.28571	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	22	384	8448	40	120	120	0.25	1	*Handtrolley*	1	1	235
7	1	*Punch* 25T	*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.73171	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	41	41	0.73171	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.71429	1	*Handtrolley*	1	1	235
	1		*Bending* 40T	1	Keranjang	100	80	50	6	384	2304	40	42	42	0.71429	1	*Handtrolley*	1	1	235
8	2	*Bending* 30T	Pencelupan	1	Keranjang	100	80	50	1000	23	23000	40	2857	2857	0.0105	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	660	30	19800	40	1538	1538	0.01951	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	42	10	420	40	97	97	0.30928	1	*Handtrolley*	1	1	235
	2		CO2 *Welding*	1	Keranjang	100	80	50	25	25	625	40	103	103	0.29126	1	*Handtrolley*	1	1	235
	2		CO2 *Welding*	1	Keranjang	100	80	50	1081	333	359973	40	2352	2352	0.01276	1	*Handtrolley*	1	1	235
	2		Pencelupan	1	Keranjang	100	80	50	78	36	2808	40	192	192	0.15625	1	*Handtrolley*	1	1	235
9	1	*Bending* 40T	CO2 *Welding*	1	Keranjang	100	80	50	1	13	13	40	7	7	4.28571	5	*Handtrolley*	1	5	1175
	1		CO2 *Welding*	1	Keranjang	100	80	50	8	18	144	40	40	40	0.75	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	30	18	540	40	106	106	0.28302	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	32	18	576	40	125	125	0.24	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	32	18	576	40	123	123	0.2439	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	31	186	40	42	42	0.71429	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	31	186	40	42	42	0.71429	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	50	300	40	43	43	0.69767	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	6	50	300	40	42	42	0.71429	1	*Handtrolley*	1	1	235
	1		Pencelupan	1	Keranjang	100	80	50	2	26	52	40	17	17	1.76471	2	*Handtrolley*	1	2	470
	1		CO2 *Welding*	1	Keranjang	100	80	50	2	30	60	40	11	11	2.72727	3	*Handtrolley*	1	3	705

Tabel D.3
Frekuensi Optimisasi (Lanjutan 1)

No	Sel	Aliran		Sel	Komponen	Nama Bahan	Satuan Bahan Datang	Jumlah Isi	Jumlah yang Dibutuhkan (1 *Box* Panel)	Jumlah Kebutuhan/ Hari	Jumlah Bahan Datang/ Hari	Dimensi Bahan Datang (cm)			Berat Bahan Datang (kg)
		Dari	Ke									p	l	t	
10	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		Gurinda	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
11	1	Gurinda	Pencelupan	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		Pencelupan	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
12	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.333
	1		*Handspray*	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.4
	1		*Handspray*	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.014
	1		*Handspray*	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.026
	1		*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.375
	1		*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.319
	1		*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.325
	1		*Handspray*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		*Handspray*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.934
	1		*Handspray*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.921
	1		*Handspray*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.939
	1		*Handspray*	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.307
	1		*Handspray*	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.409
	1		*Handspray*	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.403
	1		*Handspray*	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.208
13	1	*Handspray*	*Oven*	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		*Oven*	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		*Oven*	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		*Oven*	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		*Oven*	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Oven*	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Oven*	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		*Oven*	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		*Oven*	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		*Oven*	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		*Oven*	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		*Oven*	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
14	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		Meja Inspeksi	1	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		Meja Inspeksi	1	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		Meja Inspeksi	1	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		Meja Inspeksi	1	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		Meja Inspeksi	1	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		Meja Inspeksi	1	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
15	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1		Unit	1	1	30	30	50	50	20	6.337
	1		*Finishing*	3	*Green Plat*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	36.4	9.4	0.15	0.404
	1		*Finishing*	3	*Joint* Dudukan *Afdeck*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	2	4	2.1	0.018
	1		*Finishing*	3	Kait Gembok *Body*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	4.5	2.6	1.65	0.03
	1		*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	47.581	5.15	2.65	0.379
	1		*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.323
	1		*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	44.7	5	2.65	0.329
	1		*Finishing*	3	*Afdeck* A1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Finishing*	3	*Afdeck* A2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	23.176	1.6	0.938
	1		*Finishing*	3	*Afdeck* C1 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.925
	1		*Finishing*	3	*Afdeck* C2 - 1.2mm	Plat Baja 2400 x 1220 x 1.3	Unit	1	1	30	30	43.2	22.176	1	0.943
	1		*Finishing*	3	*Mounting Plate*	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	40.718	40.718	1.86	2.311
	1		*Finishing*	3	Dudukan 260 - 2mm	Plat Baja 1210 x 440 x 2	Unit	1	1	30	30	26	5.65	5	0.413
	1		Meja *Quality Control*	3	*Sub Assembly* 2		Unit	1	1	30	30	49.221	49.221	1.621	0.407
	1		Meja *Quality Control*	3	SP Pintu	Plat Baja 2400 x 1220 x 1.5	Unit	1	1	30	30	32.5	3	1.36	0.212
16	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1		Unit	1	1	30	30	50	50	20	14.367
17	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*		Unit	1	1	30	30	50	50	20	15

Tabel D.3
Frekuensi Optimisasi (Lanjutan 1)

No	Sel	Aliran		Sel	Alat Simpan	Dimensi Alat Simpan (cm)			Kapasitas Alat Simpan						Jumlah Alat Simpan		Alat *Material Handling*	Kapasitas *Material Handling*	Frekuensi/ Hari	Frekuensi/ Tahun
		Dari	Ke			p	l	t	Volume			Berat		Terpilih	Desimal	Round Up				
									h	v	Total	Kapasita	Total							
10	1	CO2 *Welding*	Gurinda	1	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handpallet*	1	15	3525
	1		Gurinda	1	Pallet	100	80	20	2	12	24	60	148	24	1.25	2	*Handpallet*	1	2	470
11	1	Gurinda	Pencelupan	1	Keranjang	100	80	50	2	2	4	40	6	4	7.5	8	*Handtrolley*	1	8	1880
	1		Pencelupan	1	Keranjang	100	80	50	2	30	60	40	99	60	0.5	1	*Handtrolley*	1	1	235
12	1	Pencelupan	*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
	1		*Handspray*	1	*Hanger*	200	1	150	5	1	5	10	25	5	6	6	*Hanger*	30	0.2	47
	1		*Handspray*	1	*Hanger*	200	1	150	100	1	100	10	714	100	0.3	1	*Hanger*	30	0.033	8
	1		*Handspray*	1	*Hanger*	200	1	150	44	1	44	10	384	44	0.68182	1	*Hanger*	30	0.033	8
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	31	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	7	1	7	10	24	7	4.28571	5	*Hanger*	30	0.167	40
	1		*Handspray*	1	*Hanger*	200	1	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
	1		*Handspray*	1	*Hanger*	200	1	150	6	1	6	10	48	6	5	5	*Hanger*	30	0.167	40
13	1	*Handspray*	*Oven*	1	*Hanger*	200	1	150	4	1	4	10	1	1	30	30	*Hanger*	30	1	235
	1		*Oven*	1	*Hanger*	200	1	150	5	1	5	10	24	5	6	6	*Hanger*	30	0.2	47
	1		*Oven*	1	*Hanger*	200	1	150	100	1	100	10	555	100	0.3	1	*Hanger*	30	0.033	8
	1		*Oven*	1	*Hanger*	200	1	150	44	1	44	10	333	44	0.68182	1	*Hanger*	30	0.033	8
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	26	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	30	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	10	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	4	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	7	1	7	10	24	7	4.28571	5	*Hanger*	30	0.167	40
	1		*Oven*	1	*Hanger*	200	1	150	4	1	4	10	24	4	7.5	8	*Hanger*	30	0.267	63
	1		*Oven*	1	*Hanger*	200	1	150	6	1	6	10	47	6	5	5	*Hanger*	30	0.167	40
14	1	*Oven*	Meja Inspeksi	1	Meja	250	150	100	15	5	75	50	7	7	4.28571	5	*Handtrolley*	1	5	1175
	1		Meja Inspeksi	1	Meja	250	150	100	90	666	59940	50	123	123	0.2439	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	4625	47	217375	50	2777	2777	0.0108	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	3135	60	188100	50	1666	1666	0.01801	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	145	37	5365	50	131	131	0.22901	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	150	37	5550	50	154	154	0.19481	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	150	37	5550	50	151	151	0.19868	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	62	1860	50	53	53	0.56604	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	62	1860	50	53	53	0.56604	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	100	3000	50	54	54	0.55556	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	30	100	3000	50	53	53	0.56604	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	18	53	954	50	21	21	1.42857	2	*Handtrolley*	1	2	470
	1		Meja Inspeksi	1	Meja	250	150	100	234	20	4680	50	121	121	0.24793	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	15	61	915	50	122	122	0.2459	1	*Handtrolley*	1	1	235
	1		Meja Inspeksi	1	Meja	250	150	100	350	73	25550	50	235	235	0.12766	1	*Handtrolley*	1	1	235
15	1	Meja Inspeksi	*Finishing*	3	Pallet	100	80	20	2	1	2	60	9	2	15	15	*Handtrolley*	1	15	3525
	1		*Finishing*	3	Pallet	100	80	20	16	133	2128	60	148	148	0.2027	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	1000	9	9000	60	3333	3333	0.009	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	660	12	7920	60	2000	2000	0.015	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	30	7	210	60	158	158	0.18987	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	32	7	224	60	185	185	0.16216	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	32	7	224	60	182	182	0.16484	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	12	72	60	63	63	0.47619	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	12	72	60	63	63	0.47619	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	20	120	60	64	64	0.46875	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	6	20	120	60	63	63	0.47619	1	*Handtrolley*	1	1	235
	1		*Finishing*	3	Pallet	100	80	20	2	10	20	60	25	20	1.5	2	*Handtrolley*	1	2	470
	1		*Finishing*	3	Pallet	100	80	20	42	4	168	60	145	145	0.2069	1	*Handtrolley*	1	1	235
	1		Meja *Quality Control*	3	Pallet	100	80	20	2	12	24	60	147	24	1.25	2	*Handtrolley*	1	2	470
	1		Meja *Quality Control*	3	Pallet	100	80	20	78	14	1092	60	283	283	0.10601	1	*Handtrolley*	1	1	235
16	3	*Finishing*	Meja *Quality Control*	3	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525
17	3	Meja *Quality Control*	Tempat Penyimpanan	-	Pallet	100	80	20	2	1	2	60	4	2	15	15	*Handpallet*	1	15	3525

LAMPIRAN E

OMH PROSES, NON DUPLIKASI, DAN OPTIMASI

Tabel E.1
OMH *Process*

No	Aliran		Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen
	Dari	Ke			Dari	Ke					
1	*Bending* 30T	CO2 *Welding*	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945
2	*Bending* 30T	CO2 *Welding*	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	
3	*Bending* 30T	Pencelupan	*Joint* Dudukan *Afdeck*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	Rp 475,761
4	*Bending* 30T	Pencelupan	Kait Gembok *Body*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	
5	*Bending* 30T	Pencelupan	Dudukan 260 - 2mm	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	
6	*Bending* 30T	Pencelupan	SP Pintu	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	
7	*Bending* 40T	CO2 *Welding*	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965	Rp 680,338
8	*Bending* 40T	CO2 *Welding*	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593	
9	*Bending* 40T	CO2 *Welding*	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779	
10	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	Rp 1,112,047
11	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
12	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
13	*Bending* 40T	Pencelupan	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
14	*Bending* 40T	Pencelupan	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
15	*Bending* 40T	Pencelupan	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
16	*Bending* 40T	Pencelupan	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	
17	*Bending* 40T	Pencelupan	*Mounting Plate*	470	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 247,122	
18	CNC	*Bending* 40T	*Body*	1175	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 499,328	Rp 599,193
19	CNC	*Bending* 40T	*Body* Atas Bawah	235	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	
20	CNC	Pencelupan	*Green Plat*	235	1201500	2251500	1298.315	Rp 0.50	*Handtrolley*	Rp 152,157	Rp 152,157
21	CNC	*Bending* 30T	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 1,070,797
22	CNC	*Bending* 30T	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
23	CNC	*Bending* 40T	*Mounting Plate*	470	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 199,731	
24	CNC	*Bending* 30T	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
25	CNC	*Bending* 40T	Pintu	705	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 299,597	
26	CNC	*Bending* 30T	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
27	CNC	*Bending* 30T	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
28	CNC	*Bending* 30T	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
29	CO2 *Welding*	Gurinda	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240
30	CO2 *Welding*	Gurinda	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264	
31	*Finishing*	Meja *Quality Control*	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549
32	Gurinda	Pencelupan	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405
33	Gurinda	Pencelupan	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823	
34	*Handspray*	*Oven*	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246	Rp 314,649
35	*Handspray*	*Oven*	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649	
36	*Handspray*	*Oven*	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
37	*Handspray*	*Oven*	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
38	*Handspray*	*Oven*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
39	*Handspray*	*Oven*	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
40	*Handspray*	*Oven*	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
41	*Handspray*	*Oven*	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
42	*Handspray*	*Oven*	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
43	*Handspray*	*Oven*	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
44	*Handspray*	*Oven*	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
45	*Handspray*	*Oven*	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
46	*Handspray*	*Oven*	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
47	*Handspray*	*Oven*	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
48	*Handspray*	*Oven*	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
49	Meja Inspeksi	*Finishing*	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152	Rp 4,248,816
50	Meja Inspeksi	*Finishing*	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
51	Meja Inspeksi	*Finishing*	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
52	Meja Inspeksi	*Finishing*	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
53	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
54	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
55	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
56	Meja Inspeksi	*Finishing*	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
57	Meja Inspeksi	*Finishing*	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
58	Meja Inspeksi	*Finishing*	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
59	Meja Inspeksi	*Finishing*	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
60	Meja Inspeksi	*Finishing*	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487	
61	Meja Inspeksi	*Finishing*	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
62	Meja Inspeksi	Meja *Quality Control*	*Sub Assembly* 2	470	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 312,653	Rp 468,980
63	Meja Inspeksi	Meja *Quality Control*	SP Pintu	235	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 156,327	
64	Meja *Quality Control*	Tempat Penyimpanan	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914
65	*Oven*	Meja Inspeksi	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609	Rp 2,634,437
66	*Oven*	Meja Inspeksi	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
67	*Oven*	Meja Inspeksi	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
68	*Oven*	Meja Inspeksi	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
69	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
70	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
71	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
72	*Oven*	Meja Inspeksi	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
73	*Oven*	Meja Inspeksi	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
74	*Oven*	Meja Inspeksi	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
75	*Oven*	Meja Inspeksi	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
76	*Oven*	Meja Inspeksi	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444	
77	*Oven*	Meja Inspeksi	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
78	*Oven*	Meja Inspeksi	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
79	*Oven*	Meja Inspeksi	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	

Tabel E.1
OMH *Process* (Lanjutan)

80	Pencelupan	*Handspray*	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	
81	Pencelupan	*Handspray*	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843	
82	Pencelupan	*Handspray*	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718	
83	Pencelupan	*Handspray*	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718	
84	Pencelupan	*Handspray*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
85	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
86	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
87	Pencelupan	*Handspray*	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190
88	Pencelupan	*Handspray*	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
89	Pencelupan	*Handspray*	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
90	Pencelupan	*Handspray*	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
91	Pencelupan	*Handspray*	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
92	Pencelupan	*Handspray*	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590	
93	Pencelupan	*Handspray*	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
94	Pencelupan	*Handspray*	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590	
95	Penyimpanan Plat	CNC	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
96	Penyimpanan Plat	CNC	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
97	Penyimpanan Plat	CNC	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
98	Penyimpanan Plat	CNC	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
99	Penyimpanan Plat	CNC	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
100	Penyimpanan Plat	CNC	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043
101	Penyimpanan Plat	CNC	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
102	Penyimpanan Plat	CNC	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
103	Penyimpanan Plat	CNC	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
104	Penyimpanan Plat	CNC	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
105	Penyimpanan Plat	CNC	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
106	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
107	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
108	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
109	Penyimpanan Plat	*Shearing*	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500
110	Penyimpanan Plat	*Shearing*	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
111	Penyimpanan Plat	*Shearing*	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
112	Penyimpanan Plat	*Shearing*	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
113	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	
114	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343
115	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	
116	*Punch* 25T	*Bending* 40T	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	
117	*Punch* 25T	*Bending* 40T	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834
118	*Punch* 25T	*Bending* 40T	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	
119	*Punch* 25T	*Bending* 40T	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	
120	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	
121	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558
122	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	
123	*Shearing*	*Punch* 25T	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	
124	*Shearing*	*Punch* 25T	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787
125	*Shearing*	*Punch* 25T	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	
126	*Shearing*	*Punch* 25T	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	
127	*Storage*	*Finishing*	*Handle* 75	2820	350000	1690500	945.900	Rp 0.36	Operator	Rp 972,926	
128	*Storage*	*Finishing*	Baut *Hex* M6x35	940	350000	1690500	945.900	Rp 0.36	Operator	Rp 324,309	
129	*Storage*	*Finishing*	Baut M6x30	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231	
130	*Storage*	*Finishing*	Baut JF M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154	
131	*Storage*	*Finishing*	Mur M6	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231	Rp 3,405,240
132	*Storage*	*Finishing*	Ring *Plat* M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386	
133	*Storage*	*Finishing*	Ring Per M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386	
134	*Storage*	*Finishing*	Baut M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154	
135	*Storage*	*Finishing*	Ring Plat M5	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231	
136	*Storage*	*Finishing*	Baut M6x10	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231	
137	*Storage*	Meja *Quality Control*	*Handle Push* Jadul	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575	
138	*Storage*	Meja *Quality Control*	Engsel Hitam Kecil	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575	
139	*Storage*	Meja *Quality Control*	Baut M6x15 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429	
140	*Storage*	Meja *Quality Control*	Baut M6x10 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429	Rp 1,857,441
141	*Storage*	Meja *Quality Control*	Mur M6	470	350000	1900000	985.006	Rp 0.36	Operator	Rp 168,858	
142	*Storage*	Meja *Quality Control*	Ring *Plat* M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287	
143	*Storage*	Meja *Quality Control*	Ring Per M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287	
Total OMH Proses										Rp 43,666,165	Rp 43,666,165

Tabel E.2
OMH *Non* Duplikasi

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	Rp 6,264,500
2	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
3	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
4	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
5	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
6	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
7	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
8	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043	Rp 10,895,043
9	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
10	-	Penyimpanan Plat	CNC	2	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
11	-	Penyimpanan Plat	CNC	2	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
12	-	Penyimpanan Plat	CNC	2	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
13	-	Penyimpanan Plat	CNC	2	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
14	-	Penyimpanan Plat	CNC	2	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
15	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
16	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
17	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
18	-	Penyimpanan Plat	CNC	2	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	945.900	Rp 0.36	Operator	Rp 972,926	Rp 3,405,240	Rp 5,262,681
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	945.900	Rp 0.36	Operator	Rp 324,309		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575	Rp 1,857,441	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	985.006	Rp 0.36	Operator	Rp 168,858		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287		
36	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	Rp 9,274,829
37	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787	
40	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343	
44	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965	Rp 680,338	
51	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593		
52	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779		
53	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	Rp 1,112,047	
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
56	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
60	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 247,122		
61	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
62	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
63	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
64	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
65	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
66	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
67	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
68	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
69	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
70	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
78	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel E.2
OMH *Non* Duplikasi (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 9,274,829
95	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
96	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
97	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
98	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
103	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
107	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
109	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	2	CNC	*Bending* 40T	1	*Body*	1175	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 499,328		
111	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	Rp 1,098,521	
112	2	CNC	*Bending* 40T	1	*Mounting Plate*	470	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 199,731		
113	2	CNC	*Bending* 40T	1	Pintu	705	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 299,597		
114	2	CNC	Pencelupan	1	*Green Plat*	235	1201500	2251500	1298.315	Rp 0.50	*Handtrolley*	Rp 152,157	Rp 152,157	
115	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945	Rp 1,868,383
116	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972		
117	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
118	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	Rp 475,761	
119	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
120	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
121	2	CNC	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
122	2	CNC	*Bending* 30T	2	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
123	2	CNC	*Bending* 30T	2	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 571,469	Rp 571,469
124	2	CNC	*Bending* 30T	2	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
125	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
126	2	CNC	*Bending* 30T	2	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 4,717,796
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 312,653	Rp 468,980	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 156,327		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH Non Duplikasi												Rp43,666,165	Rp43,666,165	Rp43,666,165

Tabel E.3
OMH Optimasi

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,848,891	Rp 11,113,392
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	945.900	Rp 0.36	Operator	Rp 972,926	Rp 3,405,240	Rp 5,262,681
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	945.900	Rp 0.36	Operator	Rp 324,309		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575	Rp 1,857,441	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	985.006	Rp 0.36	Operator	Rp 506,575		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	985.006	Rp 0.36	Operator	Rp 84,429		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	985.006	Rp 0.36	Operator	Rp 168,858		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	985.006	Rp 0.36	Operator	Rp 253,287		
36	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	470	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 162,106	Rp 162,106	Rp 9,570,279
37	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	1137.790	Rp 0.50	*Handtrolley*	Rp 133,344	Rp 133,344	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	
39	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
40	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787	
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
43	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
44	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343	
46	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
47	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
51	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
52	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965	Rp 680,338	
53	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593		
62	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	Rp 1,112,047	
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
56	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
60	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
61	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 247,122		
63	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
64	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
65	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
66	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
67	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
68	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
69	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
70	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
78	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
80	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
81	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel E.3
OMH Optimasi (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
82	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246	Rp 314,649	Rp 9,570,279
83	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
84	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
85	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
93	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
96	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
97	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609	Rp 2,634,437	
98	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
103	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
107	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
109	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
111	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
112	1	CNC (Dup)	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 305,728	Rp 305,728
113	1	CNC (Dup)	*Bending* 30T	2	Kait Gembok *Body*	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
114	1	CNC (Dup)	*Bending* 30T	2	Dudukan 260 - 2mm	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
115	1	CNC (Dup)	*Bending* 30T	2	SP Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
116	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152	Rp 4,248,816	Rp 4,717,796
117	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
118	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
119	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
120	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
121	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
122	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
123	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
124	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
125	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
126	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
127	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
128	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 312,653	Rp 468,980	
130	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	1333.892	Rp 0.50	*Handtrolley*	Rp 156,327		
131	2	CNC	*Bending* 40T	1	*Body*	1175	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 405,264	Rp 729,475	Rp 1,347,180
132	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 81,053		
133	2	CNC	*Bending* 40T	1	Pintu	705	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 243,158		
134	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945	
135	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972		
136	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940	Rp 475,761	
137	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
138	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
139	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	1014.884	Rp 0.50	*Handtrolley*	Rp 118,940		
140	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 152,864	Rp 152,864
141	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH Optimasi												Rp 41,322,126	Rp 41,322,126	Rp 41,322,126

LAMPIRAN F

From to Chart

Tabel F.1
FTC *Process Inflow*

From to Chart By Process Inflow																		
From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.445	0.392	0	0.837
Penyimpanan Plat	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CNC	0	0		0	0	0	1	0.716	0	0	0.049	0	0	0	0	0	0	1.766
Shearing	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0		0	0	0.122	0	0	0	0	0	0	0	0	0	0.122
Punch 25T	0	0	0	0	0		0	0.162	0	0	0	0	0	0	0	0	0	0.162
Bending 30T	0	0	0	0	0	0		0	0.173	0	0.154	0	0	0	0	0	0	0.327
Bending 40T	0	0	0	0	0	0	0		0.827	0	0.361	0	0	0	0	0	0	1.189
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		0.435	0	0	0	0	0	0	0.435
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.555	0.099	0	0.654
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.509	0	0.509
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel F.2
FTC *Non* Duplikasi Keseluruhan

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 3,405,240	Rp 1,857,441	Rp -	Rp 5,262,681
Penyimpanan Plat	Rp -		Rp 10,895,043	Rp 6,264,500	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 17,159,544
CNC	Rp -	Rp -		Rp -	Rp -	Rp -	Rp 571,469	Rp 1,098,521	Rp -	Rp -	Rp 152,157	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,822,147
Shearing	Rp -	Rp -	Rp -		Rp 243,558	Rp 322,787	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 566,345
Punch 16T	Rp -	Rp -	Rp -	Rp -		Rp -	Rp -	Rp 187,343	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 187,343
Punch 25T	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 247,834	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 247,834
Bending 30T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 141,945	Rp -	Rp 475,761	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 617,705
Bending 40T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 680,338	Rp -	Rp 1,112,047	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,792,385
CO2 *Welding*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,753,240	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,753,240
Gurinda	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,339,405	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,339,405
Pencelupan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 439,190	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 439,190
Handspray	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 314,649	Rp -	Rp -	Rp -	Rp -	Rp 314,649
Oven	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,634,437	Rp -	Rp -	Rp -	Rp 2,634,437
Meja Inspeksi	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 4,248,816	Rp 468,980	Rp -	Rp 4,717,796
Finishing	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,407,549	Rp -	Rp 2,407,549
Meja *Quality Control*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -
Total	Rp -	Rp -	Rp 10,895,043	Rp 6,264,500	Rp 243,558	Rp 322,787	Rp 571,469	Rp 1,533,698	Rp 822,283	Rp 1,753,240	Rp 3,079,370	Rp 439,190	Rp 314,649	Rp 2,634,437	Rp 7,654,057	Rp 4,733,969	Rp 2,403,914	Rp 43,666,165

Tabel F.3
FTC *Non* Duplikasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.647	0.353	0	1
Penyimpanan Plat	0		0.635	0.365	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0.314	0.603	0	0	0.084	0	0	0	0	0	0	1
Shearing	0	0	0		0.430	0.570	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0		0	1	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0		0	0.230	0	0.770	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0		0.380	0	0.620	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.901	0.099	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.635	0.365	0.430	0.570	0.314	2.603	0.609	1	2.474	1	1	1	1.548	1.452	1	

Tabel F.4
FTC *Non* Duplikasi *Inflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.445	0.392	0	0.837
Penyimpanan Plat	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CNC	0	0		0	0	0	1	0.716	0	0	0.049	0	0	0	0	0	0	1.766
Shearing	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0		0	0	0.122	0	0	0	0	0	0	0	0	0	0.122
Punch 25T	0	0	0	0	0		0	0.162	0	0	0	0	0	0	0	0	0	0.162
Bending 30T	0	0	0	0	0	0		0	0.173	0	0.154	0	0	0	0	0	0	0.327
Bending 40T	0	0	0	0	0	0	0		0.827	0	0.361	0	0	0	0	0	0	1.189
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		0.435	0	0	0	0	0	0	0.435
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.555	0.099	0	0.654
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.509	0	0.509
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel F.5
FTC Antar Sel *Non* Duplikasi Keseluruhan

From to Chart Antar Sel *Non Duplikasi*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 5,262,681		Rp 5,262,681
Penyimpanan Plat			Rp 6,264,500	Rp 10,895,043			Rp 17,159,544
Sel 1					Rp 4,717,796		Rp 4,717,796
Sel 2			Rp 1,868,383				Rp 1,868,383
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 8,132,884	Rp 10,895,043	Rp 9,980,477	Rp 2,403,914	Rp 31,412,318

Tabel F.6
FTC Antar Sel *Non* Duplikasi *Outflow*

From to Chart Antar Sel *Non Duplikasi Outflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.365	0.635	0	0	1
Sel 1	0	0		0	1	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	0.259	0.347	0.318	0.077	

Tabel F.7
FTC Antar Sel *Non* Duplikasi *Inflow*

From to Chart Antar Sel *Non Duplikasi Inflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.527	0	0.527
Penyimpanan Plat	0		0.770	1	0	0	1.770
Sel 1	0	0		0	0.473	0	0.473
Sel 2	0	0	0.230		0	0	0.230
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

Tabel F.8
FTC Duplikasi *Outflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.647	0.353	0	1
Penyimpanan Plat	0		0.267	0.320	0.413	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0	0.173	0	0	0.827	0	0	0	0	0	0	0	0	0	1
CNC (Dup)	0	0	0		0	0	0	0	0.509	0.270	0	0	0	0.222	0	0	0	0	0	0	1
Shearing	0	0	0	0		0.430	0.570	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	0	0	1
Bending 30T (Dup)	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	1
Bending 40T (Dup)	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.901	0.099	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.267	0.320	0.413	0.430	0.570	0.173	0.509	2.270	0.827	2	1	3.222	1	1	1	1.548	1.452	1	

Tabel F.9
FTC Antar Sel Duplikasi Keselurahan

From to Chart Antar Sel *Duplikasi*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 5,262,681		Rp 5,262,681
Penyimpanan Plat			Rp 11,113,392	Rp 4,040,743			Rp 15,154,135
Sel 1					Rp 4,717,796		Rp 4,717,796
Sel 2			Rp 822,283				Rp 822,283
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 11,935,674	Rp 4,040,743	Rp 9,980,477	Rp 2,403,914	Rp 28,360,808

Tabel F.10
FTC Antar Sel Duplikasi *Outflow*

From to Chart Antar Sel *Duplikasi Outflow*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.733	0.267	0	0	1
Sel 1	0	0		0	1	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1.733	0.267	2	1	

Tabel F.11
FTC Antar Sel Duplikasi *Inflow*

From to Chart Antar Sel *Duplikasi Inflow*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.527	0	0.527
Penyimpanan Plat	0		0.931	1	0	0	1.931
Sel 1	0	0		0	0.473	0	0.473
Sel 2	0	0	0.069		0	0	0.069
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

Tabel F.12
FTC Optimasi Keseluruhan

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 3,405,240	Rp 1,857,441	Rp -	Rp 5,262,681
Penyimpanan Plat	Rp -		Rp 4,040,743	Rp 4,848,891	Rp 6,264,500	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 15,154,135
CNC	Rp -	Rp -		Rp -	Rp -	Rp -	Rp -	Rp 152,864	Rp 729,475	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 882,339
CNC (Dup)	Rp -	Rp -	Rp -		Rp -	Rp -	Rp -	Rp 305,728	Rp 162,106	Rp -	Rp -	Rp 133,344	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 601,178
Shearing	Rp -	Rp -	Rp -	Rp -		Rp 243,558	Rp 322,787	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 566,345
Punch 16T	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp -	Rp 187,343	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 187,343
Punch 25T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 247,834	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 247,834
Bending 30T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 141,945	Rp -	Rp 475,761	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 617,705
Bending 40T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 680,338	Rp -	Rp 1,112,047	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,792,385
CO2 *Welding*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,753,240	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,753,240
Gurinda	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,339,405	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,339,405
Pencelupan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 439,190	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 439,190
Handspray	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 314,649	Rp -	Rp -	Rp -	Rp -	Rp 314,649
Oven	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,634,437	Rp -	Rp -	Rp -	Rp 2,634,437
Meja Inspeksi	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 4,248,816	Rp 468,980	Rp -	Rp 4,717,796
Finishing	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,407,549	Rp -	Rp 2,407,549
Meja *Quality Control*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -
Total	Rp -	Rp -	Rp 4,040,743	Rp 4,848,891	Rp 6,264,500	Rp 243,558	Rp 322,787	Rp 458,593	Rp 1,326,757	Rp 822,283	Rp 1,753,240	Rp 3,060,557	Rp 439,190	Rp 314,649	Rp 2,634,437	Rp 7,654,057	Rp 4,733,969	Rp 2,403,914	Rp 41,322,126

Tabel F.13
FTC Optimasi *Outflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.647	0.353	0	1
Penyimpanan Plat	0		0.267	0.320	0.413	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0	0.173	0.827	0	0	0	0	0	0	0	0	0	1
CNC (Dup)	0	0	0		0	0	0	0.509	0.270	0	0	0.222	0	0	0	0	0	0	1
Shearing	0	0	0	0		0.430	0.570	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0	0		0	1	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0	0		0	0.230	0	0.770	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0	0		0.380	0	0.620	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.901	0.099	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.267	0.320	0.413	0.430	0.570	0.682	3.096	0.609	1	2.612	1	1	1	1.548	1.452	1	

Tabel F.14
FTC Optimasi *Inflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.445	0.392	0	0.837
Penyimpanan Plat	0		1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
CNC	0	0		0	0	0	0	0.333	0.550	0	0	0	0	0	0	0	0	0	0.883
CNC (Dup)	0	0	0		0	0	0	0.667	0.122	0	0	0.044	0	0	0	0	0	0	0.832
Shearing	0	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0	0		0	0	0.141	0	0	0	0	0	0	0	0	0	0.141
Punch 25T	0	0	0	0	0	0		0	0.187	0	0	0	0	0	0	0	0	0	0.187
Bending 30T	0	0	0	0	0	0	0		0	0.173	0	0.155	0	0	0	0	0	0	0.328
Bending 40T	0	0	0	0	0	0	0	0		0.827	0	0.363	0	0	0	0	0	0	1.191
CO2 *Welding*	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0		0.438	0	0	0	0	0	0	0.438
Pencelupan	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.555	0.099	0	0.654
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.509	0	0.509
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel F.15
FTC Antar Sel Keseluruhan Optimasi

From to Chart Antar Sel *Optimasi*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 5,262,681		Rp 5,262,681
Penyimpanan Plat			Rp 11,113,392	Rp 4,040,743			Rp 15,154,135
Sel 1				Rp 305,728	Rp 4,717,796		Rp 5,023,524
Sel 2			Rp 1,347,180				Rp 1,347,180
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 12,460,572	Rp 4,346,471	Rp 9,980,477	Rp 2,403,914	Rp 29,191,434

Tabel F.16
FTC Antar Sel *Outflow* Optimasi

From to Chart Antar Sel *Optimasi Outflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.733	0.267	0	0	1
Sel 1	0	0		0.061	0.939	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1.733	0.328	1.939	1	

Tabel F.17
FTC Antar Sel *Inflow* Optimasi

From to Chart Antar Sel *Optimasi Inflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.527	0	0.527
Penyimpanan Plat	0		0.892	0.930	0	0	1.822
Sel 1	0	0		0.070	0.473	0	0.543
Sel 2	0	0	0.108		0	0	0.108
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

LAMPIRAN G

SKALA

PRIORITAS

Tabel G.1
Skala Prioritas *By Process Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC			
	1			
Bending 40T	CNC	*Punch* 25T	*Punch* 16T	
	0.716	0.162	0.122	
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.827	0.173		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	Gurinda	*Bending* 40T	*Bending* 30T	CNC
	0.435	0.361	0.154	0.049
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	Meja Inspeksi	*Storage*		
	0.555	0.445		
Meja *Quality Control*	*Finishing*	*Storage*	Meja Inspeksi	
	0.509	0.392	0.099	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel G.2
Skal Prioritas *Non* Duplikasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.647	0.353	
Penyimpanan Plat	CNC	*Shearing*	
	0.635	0.365	
CNC	*Bending* 40T	*Bending* 30T	Pencelupan
	0.603	0.314	0.084
Shearing	*Punch* 25T	*Punch* 16T	
	0.570	0.430	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	Pencelupan	CO2 *Welding*	
	0.770	0.230	
Bending 40T	Pencelupan	CO2 *Welding*	
	0.620	0.380	
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.901	0.099	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel G.3
Skala Prioritas *Non* Duplikasi *Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC			
	1			
Bending 40T	CNC	*Punch* 25T	*Punch* 16T	
	0.716	0.162	0.122	
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.827	0.173		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	Gurinda	*Bending* 40T	*Bending* 30T	CNC
	0.435	0.361	0.154	0.049
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	Meja Inspeksi	*Storage*		
	0.555	0.445		
Meja *Quality Control*	*Finishing*	*Storage*	Meja Inspeksi	
	0.509	0.392	0.099	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel G.4
Skala Prioritas Antar Sel *Non* Duplikasi *Outflow*

Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 2	Sel 1
	0.635	0.365
Sel 1	Sel 3	
	1	
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel G.5
Skala Prioritas Antar Sel *Non* Duplikasi *Inflow*

Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.770	0.230
Sel 2	Penyimpanan Plat	
	1	
Sel 3	*Storage*	Sel 1
	0.527	0.473
Tempat Penyimpanan	Sel 3	
	1	

Tabel G.6
Skala Prioritas Duplikasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.647	0.353	
Penyimpanan Plat	*Shearing*	CNC (Dup)	CNC
	0.413	0.320	0.267
CNC	*Bending* 40T (Dup)	*Bending* 30T	
	0.827	0.173	
CNC (Dup)	*Bending* 30T (Dup)	*Bending* 40T	Pencelupan
	0.509	0.270	0.222
Shearing	*Punch* 25T	*Punch* 16T	
	0.570	0.430	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	CO2 *Welding*		
	1		
Bending 30T (Dup)	Pencelupan		
	1		
Bending 40T	Pencelupan		
	1		
Bending 40T (Dup)	CO2 *Welding*		
	1		
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.901	0.099	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel G.7
Skala Prioritas Antar Sel Duplikasi *Outflow*

Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 1	Sel 2
	0.733	0.267
Sel 1	Sel 3	
	1	
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel G.8
Skala Prioritas Antar Sel Duplikasi *Inflow*

Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.931	0.069
Sel 2	Penyimpanan Plat	
	1	
Sel 3	*Storage*	Sel 1
	0.527	0.473
Tempat Penyimpanan	Sel 3	
	1	

Tabel G.9
Skala Prioritas Optimasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.647	0.353	
Penyimpanan Plat	*Shearing*	CNC (Dup)	CNC
	0.413	0.320	0.267
CNC	*Bending* 40T	*Bending* 30T	
	0.827	0.173	
CNC (Dup)	*Bending* 30T	*Bending* 40T	Pencelupan
	0.509	0.270	0.222
Shearing	*Punch* 25T	*Punch* 16T	
	0.570	0.430	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	Pencelupan	CO2 *Welding*	
	0.770	0.230	
Bending 40T	Pencelupan	CO2 *Welding*	
	0.620	0.380	
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.901	0.099	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel G.10
Skala Prioritas Optimasi *Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
CNC (Dup)	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC (Dup)	CNC		
	0.667	0.333		
Bending 40T	CNC	*Punch* 25T	*Punch* 16T	CNC (Dup)
	0.550	0.187	0.141	0.122
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.827	0.173		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	Gurinda	*Bending* 40T	*Bending* 30T	CNC (Dup)
	0.438	0.363	0.155	0.044
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	Meja Inspeksi	*Storage*		
	0.555	0.445		
Meja *Quality Control*	*Finishing*	*Storage*	Meja Inspeksi	
	0.509	0.392	0.099	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel G.11
Skala Prioritas Antar Sel Optimasi *Outflow*

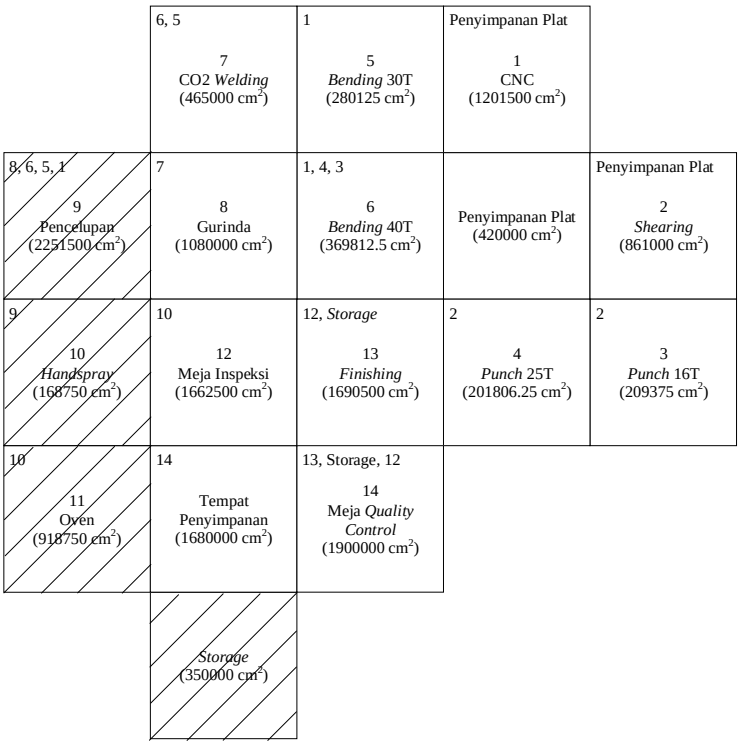
Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 1	Sel 2
	0.733	0.267
Sel 1	Sel 3	Sel 2
	0.939	0.061
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel G.12
Skala Prioritas Antar Sel Optimasi *Inflow*

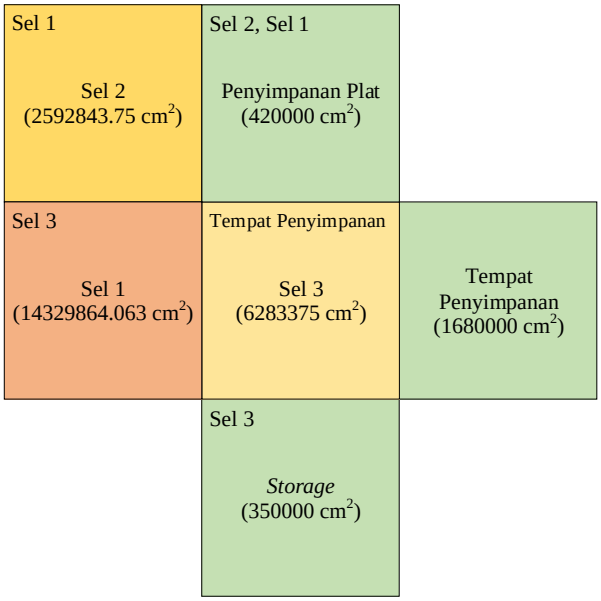
Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.892	0.108
Sel 2	Penyimpanan Plat	Sel 1
	0.930	0.070
Sel 3	*Storage*	Sel 1
	0.527	0.473
Tempat Penyimpanan	Sel 3	
	1	

LAMPIRAN H

ARD

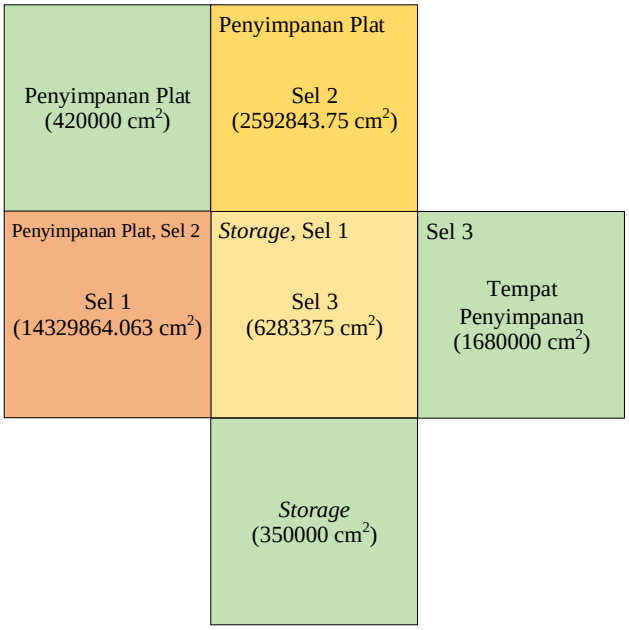


Gambar H.1
ARD *Process Inflow*

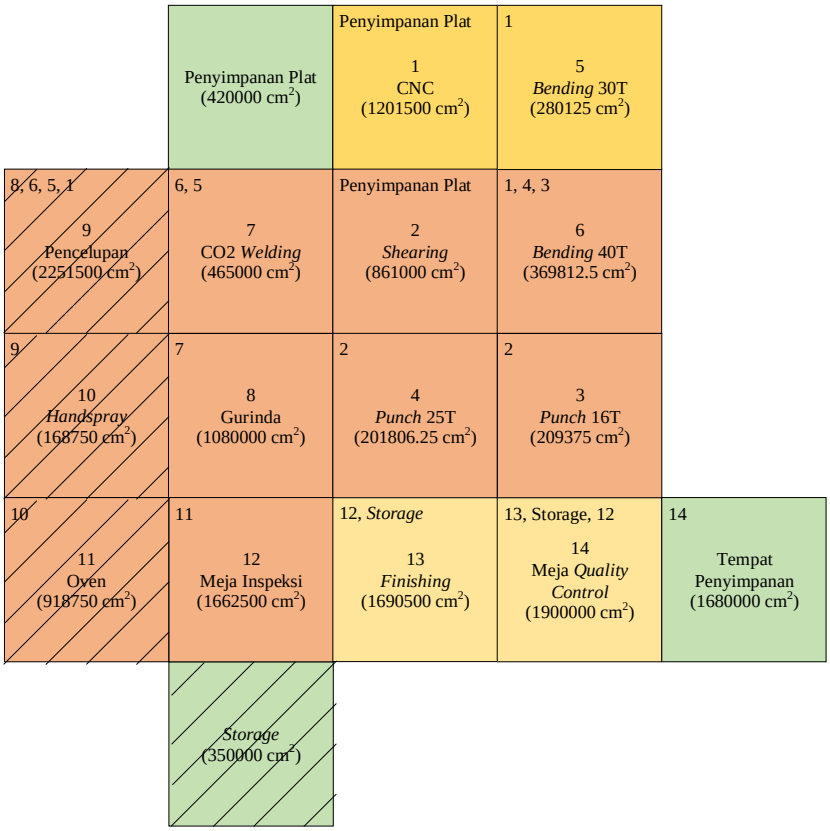


Gambar H.2
ARD *Non* Duplikasi Antar Sel *Outflow*

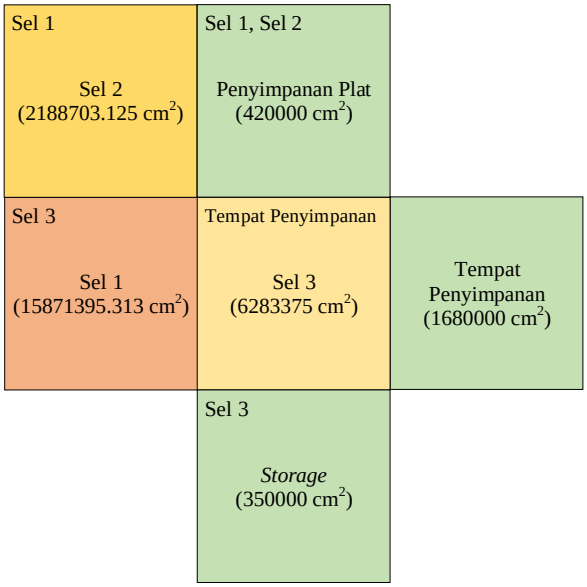
Gambar H.3
ARD *Non* Dupliaksi *Outflow*



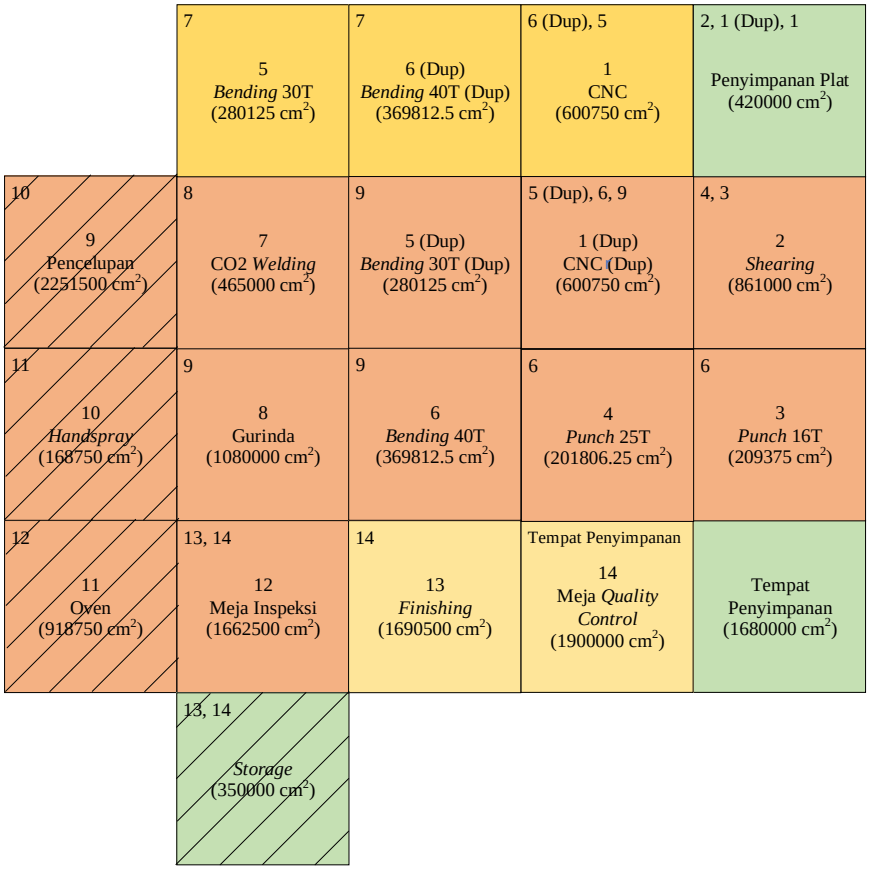
Gambar H.4
ARD *Non* Duplikasi Antar Sel *Inflow*



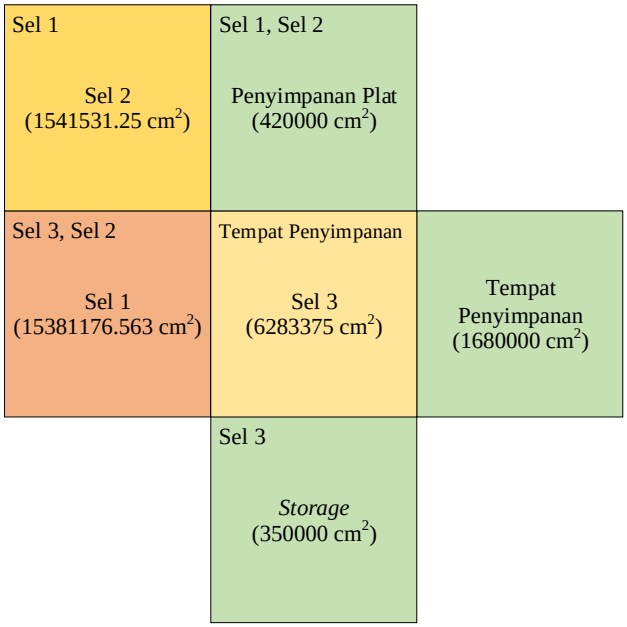
Gambar H.5
ARD *Non* Duplikasi *Inflow*



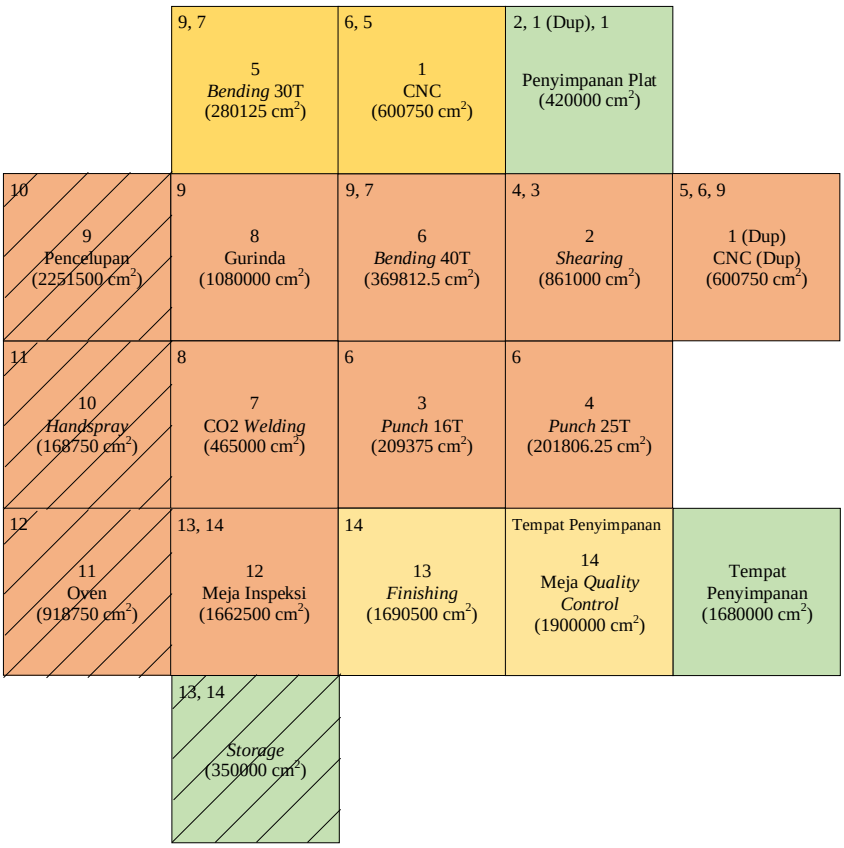
Gambar H.6
ARD Duplikasi Antar Sel *Outflow*



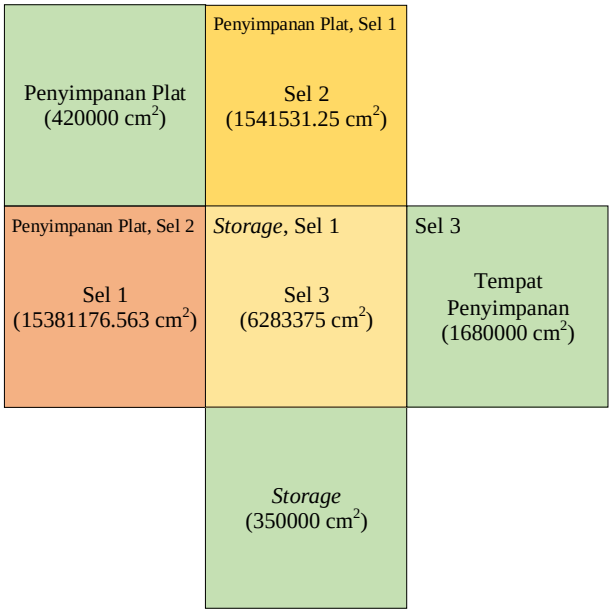
Gambar H.7
ARD Duplikasi *Outflow*



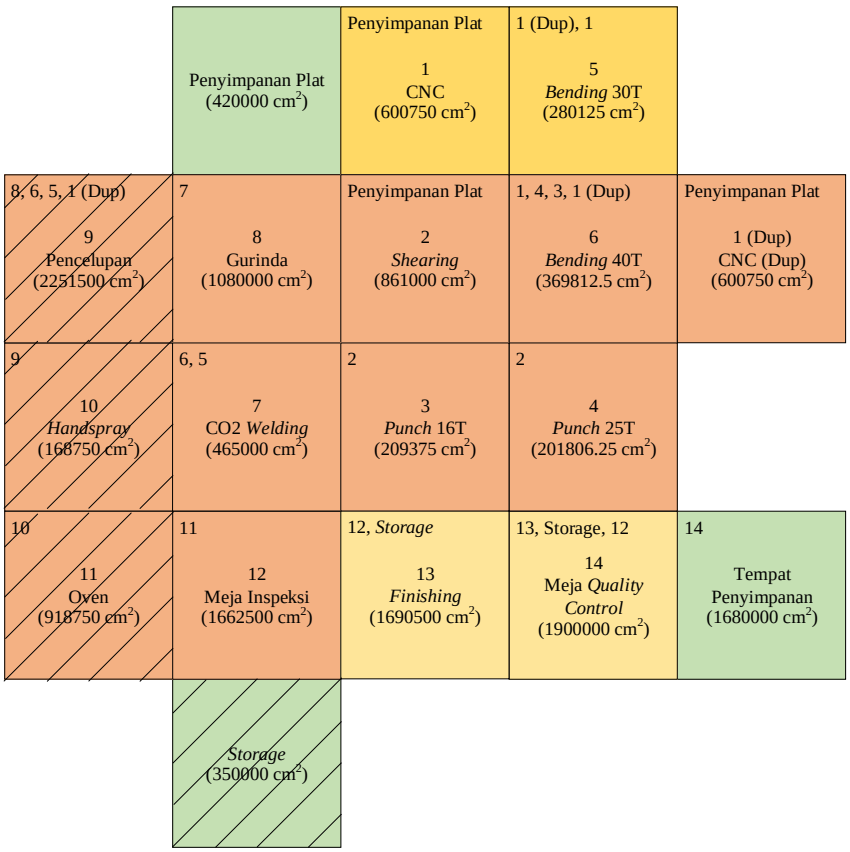
Gambar H.8
ARD Antar Sel Optimasi *Outflow*



Gambar H.8
ARD Optimasi *Outflow*



Gambar H.9
ARD Antar Sel Optimasi *Inflow*



Gambar H.10
ARD Optimasi *Inflow*

LAMPIRAN I

PENALTI

Tabel I.1
Penalti *By Process Inflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		0
Penyimpanan Plat																		0
CNC																		0
Shearing																		0
Punch 16T																		0
Punch 25T				-1														-1
Bending 30T																		0
Bending 40T			-1		-1													-2
CO2 *Welding*								-1										-1
Gurinda																		0
Pencelupan			-1				-1	-1										-3
Handspray																		0
Oven																		0
Meja Inspeksi													-1					-1
Finishing	-1																	-1
Meja *Quality Control*																		0
Tempat Penyimpanan																		0
Total																		-9

Tabel I.2
Penalti *Non* Duplikasi *Outflow*

To / *From*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage															-1	-1		-2
Penyimpanan Plat																		0
CNC											-1							-1
Shearing																		0
Punch 16T																		0
Punch 25T								-1										-1
Bending 30T									-1		-1							-2
Bending 40T											-2							-2
CO2 *Welding*																		0
Gurinda																		0
Pencelupan																		0
Handspray																		0
Oven																		0
Meja Inspeksi																-1		-1
Finishing																		0
Meja *Quality Control*																		0
Tempat Penyimpanan																		0
Total																		-9

Tabel I.3
Penalti *Non* Duplikasi *Inflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		0
Penyimpanan Plat																		0
CNC																		0
Shearing		-1																-1
Punch 16T																		0
Punch 25T				-1														-1
Bending 30T																		0
Bending 40T			-1															-1
CO2 *Welding*							-1	-2										-3
Gurinda																		0
Pencelupan			-1				-1	-1										-3
Handspray																		0
Oven																		0
Meja Inspeksi																		0
Finishing																		0
Meja *Quality Control*	-1													-1				-2
Tempat Penyimpanan																		0
Total																		-11

Tabel I.4
Penalti *Non* Duplikasi Antar Sel *Outflow*

Penalti *Non Duplikasi Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel I.5
Penalti *Non* Duplikasi Antar Sel *Inflow*

Penalti *Non Duplikasi Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel I.6
Penalti Duplikasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		-1	-1		-2
Penyimpanan Plat																					0
CNC								-1													-1
CNC (Dup)														-1							-1
Shearing							-1														-1
Punch 16T										-2											-2
Punch 25T																					0
Bending 30T																					0
Bending 30T (Dup)														-2							-2
Bending 40T														-2							-2
Bending 40T (Dup)												-1									-1
CO2 *Welding*																					0
Gurinda														-1							-1
Pencelupan																					0
Handspray																					0
Oven																					0
Meja Inspeksi																			-1		-1
Finishing																					0
Meja *Quality Control*																					0
Tempat Penyimpanan																					0
Total																					-14

Tabel I.7
Penalti Duplikasi *Outflow* Antar Sel

Penalti *Duplikasi Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat			-1				-1
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							-1

Tabel I.8
Penalti Duplikasi *Inflow* Antar Sel

Penalti *Duplikasi Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel I.9
Penalti Optimasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																-1	-1		-2
Penyimpanan Plat																			0
CNC																			0
CNC (Dup)								-2	-1			-1							-4
Shearing																			0
Punch 16T																			0
Punch 25T									-1										-1
Bending 30T										-1		-1							-2
Bending 40T												-2							-2
CO2 *Welding*																			0
Gurinda																			0
Pencelupan																			0
Handspray																			0
Oven																			0
Meja Inspeksi																	-1		-1
Finishing																			0
Meja *Quality Control*																			0
Tempat Penyimpanan																			0
Total																			-12

Tabel I.10
Penalti Optimasi *Inflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																			0
Penyimpanan Plat																			0
CNC																			0
CNC (Dup)		-2																	-2
Shearing		-1																	-1
Punch 16T																			0
Punch 25T					-1														-1
Bending 30T				-1															-1
Bending 40T			-1																-1
CO2 *Welding*								-1	-2										-3
Gurinda																			0
Pencelupan				-1				-1	-1										-3
Handspray																			0
Oven																			0
Meja Inspeksi																			0
Finishing																			0
Meja *Quality Control*	-1														-1				-2
Tempat Penyimpanan																			0
Total																			-14

Tabel I.11
Penalti Optimasi *Outflow* Antar Sel

Penalti Optimasi *Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat			-1				-1
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							-1

Tabel I.12
Penalti Optimasi *Inflow* Antar Sel

Penalti Optimasi *Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

LAMPIRAN J

TABEL

LINTASAN

Tabel J.1
Lintasan *By Process Inflow*

Dari	Ke	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
			350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
			591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
			295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
CNC	Penyimpanan Plat	1		324.037	548.065															872.102	872.102
Shearing	Penyimpanan Plat	1		324.037		463.950														787.987	787.987
Punch 16T	*Shearing*	1				463.950	228.788													692.738	692.738
Punch 25T	*Shearing*	1				463.950	457.575	224.614												1146.140	1146.140
Bending 30T	CNC	1			548.065				264.634											812.699	812.699
Bending 40T	CNC	1			548.065				529.268	304.061										1381.394	1381.394
	Punch 25T	1						224.614		304.061							1300.192			1828.868	1828.868
	Punch 16T	1					228.788	449.229		304.061							1300.192			2282.269	2282.269
CO2 *Welding*	*Bending* 40T	1							529.268	304.061	340.955									1174.284	1174.284
		2								304.061	340.955	1039.230								1684.246	
	Bending 30T	1							264.634		340.955									605.589	605.589
Gurinda	CO2 *Welding*	1									340.955	519.615								860.570	860.570
Pencelupan	Gurinda	1										519.615	750.250							1269.865	1269.865
	Bending 40T	1								304.061		1039.230	750.250							2093.541	2093.541
	Bending 30T	1							264.634	608.122		1039.230	750.250							2662.237	2662.237
		2							264.634		681.909	1039.230	750.250							2736.024	
	CNC	1			548.065				529.268		681.909	1039.230	750.250							3548.723	3474.936
		2			548.065				529.268	608.122		1039.230	750.250							3474.936	
Handspray	Pencelupan	1											750.250	205.396						955.646	955.646
Oven	*Handspray*	1												205.396	479.257					684.653	684.653
Meja Inspeksi	Oven	1													479.257	644.690			1296.148	2420.095	2420.095
Finishing	Meja Inspeksi	1														644.690	650.096			1294.786	1294.786
	Storage	1	295.804													1289.380	650.096		1296.148	3531.428	3531.428
		2	295.804														650.096	1378.405	1296.148	3620.453	
Meja *Quality Control*	*Finishing*	1															650.096	689.202		1339.299	1339.299
	Storage	1	295.804															689.202	1296.148	2281.155	2281.155
	Meja Inspeksi	1														644.690	1300.192	689.202		2634.085	2630.040
		2														644.690		689.202	1296.148	2630.040	
Tempat Penyimpanan	Meja *Quality Control*	1																689.202	648.074	1337.277	1337.277

Tabel J.2
Lintasan *Non* Duplikasi *Outflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804													1289.380	650.096			2235.280	2235.280
		Meja *Quality Control*		1	295.804													1289.380	1300.192	689.202		3574.578	3574.578
-	Penyimpanan Plat	CNC	2	1		324.037	548.065															872.102	872.102
		Shearing	1	1		324.037		463.950														787.987	787.987
2	CNC	*Bending* 40T	1	1			548.065					304.061										852.126	852.126
		Bending 30T	2	1			548.065				264.634											812.699	812.699
		Pencelupan	1	1			548.065				529.268			1039.230	750.250							2866.814	2866.814
				2			548.065					608.122		1039.230	750.250							2945.667	
1	*Shearing*	*Punch* 25T	1	1				463.950		224.614												688.565	688.565
		Punch 16T		1				463.950	228.788			608.122										1300.860	1141.966
				2				463.950	228.788	449.229												1141.966	
1	*Punch* 16T	*Bending* 40T	1	1					228.788			304.061										532.849	532.849
1	*Punch* 25T	*Bending* 40T	1	1				927.901		224.614		304.061										1456.576	986.250
				2					457.575	224.614		304.061										986.250	
2	*Bending* 30T	Pencelupan	1	1							264.634			1039.230	750.250							2054.115	2054.115
		CO2 *Welding*		1							264.634		340.955	1039.230								1644.819	1644.819
1	*Bending* 40T	Pencelupan	1	1								304.061		1039.230	750.250							2093.541	2093.541
		CO2 *Welding*		1					457.575			304.061	340.955									1102.591	1102.591
				2								304.061	340.955	1039.230								1684.246	
1	CO2 *Welding*	Gurinda	1	1									340.955	519.615								860.570	860.570
1	Gurinda	Pencelupan	1	1										519.615	750.250							1269.865	1269.865
1	Pencelupan	*Handspray*	1	1											750.250	205.396						955.646	955.646
1	*Handspray*	Oven	1	1												205.396	479.257					684.653	684.653
1	Oven	Meja Inspeksi	1	1													479.257	644.690				1123.947	1123.947
1	Meja Inspeksi	*Finishing*	3	1														644.690	650.096			1294.786	1294.786
		Meja *Quality Control*		1														644.690	1300.192	689.202		2634.085	2634.085
3	*Finishing*	Meja *Quality Control*	3	1															650.096	689.202		1339.299	1339.299
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																689.202	648.074	1337.277	1337.277

Tabel J.3
Lintasan *Non* Duplikasi *Inflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
2	CNC	Penyimpanan Plat	-	1		324.037	548.065															872.1018	872.1018
1	*Shearing*	Penyimpanan Plat	-	1		324.037	1096.130	463.950														1884.117	1827.218
				2		324.037		463.950						1039.230								1827.218	
1	*Punch* 16T	*Shearing*	1	1				463.950	228.788													692.738	692.738
1	*Punch* 25T	*Shearing*	1	1				463.950	457.575	224.614												1146.14	1146.14
				2				463.950		224.614		608.122										1296.687	
2	*Bending* 30T	CNC	2	1			548.065				264.634											812.699	812.699
1	*Bending* 40T	CNC	2	1			548.065	927.901				304.061										1780.027	1381.394
				2			548.065				529.268	304.061										1381.394	
		Punch 25T	1	1						224.614		304.061										528.6753	528.6753
		Punch 16T		1					228.788	449.229		304.061										982.0771	982.0771
				2				927.901	228.788			304.061										1460.749	
1	CO2 *Welding*	*Bending* 40T	1	1				927.901				304.061	340.955	1039.230								2612.147	1551.819
				2					457.575	449.229		304.061	340.955									1551.819	
				3				927.901	457.575			304.061	340.955									2030.492	
		Bending 30T	2	1			1096.130	927.901			264.634		340.955	1039.230								3668.85	2120.514
				2					457.575	449.229	264.634	608.122	340.955									2120.514	
				3				927.901			264.634	608.122	340.955	1039.230								3180.842	
				4			1096.130	927.901	457.575		264.634		340.955									3087.194	
				5				927.901	457.575		264.634	608.122	340.955									2599.187	
1	Gurinda	CO2 *Welding*	1	1									340.955	519.615								860.5698	860.5698
1	Pencelupan	Gurinda	1	1										519.615	750.250							1269.865	1269.865
		Bending 40T		1				927.901				304.061		1039.230	750.250							3021.442	3021.442
		Bending 30T	2	1			1096.130	927.901			264.634			1039.230	750.250							4078.145	3590.138
				2				927.901			264.634	608.122		1039.230	750.250							3590.138	
		CNC		1			548.065	927.901						1039.230	750.250							3265.446	3265.446
1	*Handspray*	Pencelupan	1	1											750.250	205.396						955.6459	955.6459
1	Oven	*Handspray*	1	1												205.396	479.257					684.6532	684.6532
1	Meja Inspeksi	Oven	1	1													479.257	644.690				1123.947	1123.947
3	*Finishing*	Meja Inspeksi	1	1														644.690	650.096			1294.786	1294.786
		Storage	-	1	295.804													1289.380	650.096			2235.28	2235.28
3	Meja *Quality Control*	*Finishing*	3	1															650.096	689.202		1339.299	1339.299
		Storage	-	1	295.804													1289.380	1300.192	689.202		3574.578	3574.578
		Meja Inspeksi	1	1														644.690	1300.192	689.202		2634.085	2634.085
-	Tempat Penyimpanan	Meja *Quality Control*	3	1																689.202	648.074	1337.277	1337.277

Tabel J.4
Lintasan Duplikasi *Outflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	280125	369812.5	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	529.268	608.122	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	264.634	304.061	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804																1289.380	650.096			2235.280	2235.280
		Meja *Quality Control*		1	295.804																1289.380	1300.192	689.202		3574.578	3574.578
-	Penyimpanan Plat	*Shearing*	1	1		324.037			463.950																787.987	787.987
		CNC (Dup)		1		324.037	775.081	387.540																	1486.658	1486.658
				2		324.037		387.540	927.901																1639.478	
		CNC	2	1		324.037	387.540																		711.577	711.577
2	CNC	*Bending* 40T (Dup)	2	1			387.540							304.061											691.601	691.601
		Bending 30T		1			387.540					264.634		608.122											1260.297	1260.297
1	CNC (Dup)	*Bending* 30T (Dup)	1	1				387.540					264.634												652.175	652.175
		Bending 40T		1				387.540					529.268	304.061											1220.870	1140.830
				2				387.540			449.229			304.061											1140.830	
		Pencelupan		1				387.540					529.268			681.909		750.250							2348.968	2348.968
1	*Shearing*	*Punch* 25T	1	1				775.081	463.950		224.614														1463.645	1146.140
				2					463.950	457.575	224.614														1146.140	
		Punch 16T		1					463.950	228.788															692.738	692.738
1	*Punch* 16T	*Bending* 40T	1	1						228.788	449.229			304.061											982.077	982.077
1	*Punch* 25T	*Bending* 40T	1	1							224.614			304.061											528.675	528.675
2	*Bending* 30T	CO2 *Welding*	1	1								264.634				340.955									605.589	605.589
1	*Bending* 30T (Dup)	Pencelupan	1	1									264.634			681.909		750.250							1696.793	1696.793
1	*Bending* 40T	Pencelupan	1	1									529.268	304.061		681.909		750.250							2265.488	2265.488
				2										304.061		681.909	1039.230	750.250							2775.451	
2	*Bending* 40T (Dup)	CO2 *Welding*	1	1								529.268			304.061	340.955									1174.284	1174.284
				2									529.268		304.061	340.955									1174.284	
1	CO2 *Welding*	Gurinda	1	1												340.955	519.615								860.570	860.570
1	Gurinda	Pencelupan	1	1												681.909	519.615	750.250							1951.774	1951.774
1	Pencelupan	*Handspray*	1	1														750.250	205.396						955.646	955.646
1	*Handspray*	Oven	1	1															205.396	479.257					684.653	684.653
1	Oven	Meja Inspeksi	1	1																479.257	644.690				1123.947	1123.947
1	Meja Inspeksi	*Finishing*	3	1																	644.690	650.096			1294.786	1294.786
		Meja *Quality Control*		1																	644.690	1300.192	689.202		2634.085	2634.085
3	*Finishing*	Meja *Quality Control*	3	1																		650.096	689.202		1339.299	1339.299
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																			689.202	648.074	1337.277	1337.277

Tabel J.5
Lintasan Optimasi *Outflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804														1289.380	650.096			2235.28	2235.28
		Meja *Quality Control*		1	295.804														1289.380	1300.192	689.202		3574.58	3574.58
-	Penyimpanan Plat	*Shearing*	1	1		324.037			463.950														787.987	787.987
		CNC (Dup)		1		324.037		387.540	927.901														1639.48	1486.66
				2		324.037	775.081	387.540															1486.66	
		CNC	2	1		324.037	387.540																711.577	711.577
2	CNC	*Bending* 40T	1	1			387.540						304.061										691.601	691.601
		Bending 30T	2	1			387.540					264.634											652.175	652.175
1	CNC (Dup)	*Bending* 30T	2	1				387.540	927.901			264.634	608.122		1039.230								3227.43	2963.28
				2			775.081	387.540	927.901			264.634	608.122										2963.28	
		Bending 40T	1	1				387.540	927.901				304.061										1619.5	1619.5
		Pencelupan	1	1				387.540	927.901				608.122		1039.230	750.250							3713.04	3713.04
1	*Shearing*	*Punch* 25T	1	1					463.950		224.614												688.565	688.565
		Punch 16T		1					463.950	228.788			608.122										1300.86	1141.97
				2					463.950	228.788	449.229												1141.97	
1	*Punch* 16T	*Bending* 40T	1	1						228.788			304.061										532.849	532.849
1	*Punch* 25T	*Bending* 40T	1	1					927.901		224.614		304.061										1456.58	986.25
				2						457.575	224.614		304.061										986.25	
2	*Bending* 30T	Pencelupan	1	1								264.634			1039.230	750.250							2054.11	2054.11
		CO2 *Welding*		1								264.634		340.955	1039.230								1644.82	1644.82
1	*Bending* 40T	Pencelupan	1	1									304.061	340.955	1039.230								1684.25	1684.25
		CO2 *Welding*		1									304.061	340.955	1039.230								1684.25	1102.59
				2						457.575			304.061	340.955									1102.59	
1	CO2 *Welding*	Gurinda	1	1										340.955	519.615								860.57	860.57
1	Gurinda	Pencelupan	1	1											519.615	750.250							1269.87	1269.87
1	Pencelupan	*Handspray*	1	1												750.250	205.396						955.646	955.646
1	*Handspray*	Oven	1	1													205.396	479.257					684.653	684.653
1	Oven	Meja Inspeksi	1	1														479.257	644.690				1123.95	1123.95
1	Meja Inspeksi	*Finishing*	3	1															644.690	650.096			1294.79	1294.79
		Meja *Quality Control*		1															644.690	1300.192	689.202		2634.08	2634.08
3	*Finishing*	Meja *Quality Control*	3	1																650.096	689.202		1339.3	1339.3
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																	689.202	648.074	1337.28	1337.28

Tabel J.6
Lintasan Optimasi *Inflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
2	CNC	Penyimpanan Plat	-	1		324.037	387.540																711.5774	711.5774
1	CNC (Dup)	Penyimpanan Plat	-	1		324.037		387.540	927.901				608.122		1039.230								3286.831	2624.048
				2		324.037	775.081	387.540	927.901				608.122										3022.681	
				3		324.037	775.081	387.540				529.268	608.122										2624.048	
1	*Shearing*	Penyimpanan Plat	-	1		324.037			463.950						1039.230								1827.218	1563.068
				2		324.037	775.081		463.950														1563.068	
1	*Punch* 16T	*Shearing*	1	1					463.950	228.788													692.738	692.738
1	*Punch* 25T	*Shearing*	1	1					463.950		224.614		608.122										1296.687	1146.14
				2					463.950	457.575	224.614												1146.14	
2	*Bending* 30T	CNC (Dup)	1	1				387.540				264.634	608.122										1260.297	1260.297
		CNC	2	1			387.540					264.634											652.1745	652.1745
1	*Bending* 40T	CNC	2	1			387.540					529.268	304.061										1220.87	1220.87
				2			387.540		927.901				304.061										1619.502	
		Punch 25T	1	1							224.614		304.061										528.6753	528.6753
		Punch 16T		1					927.901	228.788			304.061										1460.749	982.0771
				2						228.788	449.229		304.061										982.0771	
		CNC (Dup)		1				387.540					304.061										691.6014	691.6014
1	CO2 *Welding*	*Bending* 40T	1	1					927.901				304.061	340.955	1039.230								2612.147	1551.819
				2						457.575	449.229		304.061	340.955									1551.819	
				3					927.901	457.575			304.061	340.955									2030.492	
		Bending 30T	2	1			775.081		927.901			264.634		340.955	1039.230								3347.801	2120.514
				2					927.901			264.634	608.122	340.955	1039.230								3180.842	
				3						457.575	449.229	264.634	608.122	340.955									2120.514	
				4			775.081		927.901	457.575		264.634		340.955									2766.145	
				5					927.901	457.575		264.634	608.122	340.955									2599.187	
1	Gurinda	CO2 *Welding*	1	1										340.955	519.615								860.5698	860.5698
1	Pencelupan	Gurinda	1	1											519.615	750.250							1269.865	1269.865
		Bending 40T		1					927.901				304.061		1039.230	750.250							3021.442	3021.442
		Bending 30T	2	1					927.901			264.634	608.122		1039.230	750.250							3590.138	3590.138
				2			775.081		927.901			264.634			1039.230	750.250							3757.096	
		CNC (Dup)	1	1				387.540	927.901				608.122		1039.230	750.250							3713.044	3713.044
1	*Handspray*	Pencelupan	1	1												750.250	205.396						955.6459	955.6459
1	Oven	*Handspray*	1	1													205.396	479.257					684.6532	684.6532
1	Meja Inspeksi	Oven	1	1														479.257	644.690				1123.947	1123.947
3	*Finishing*	Meja Inspeksi	1	1															644.690	650.096			1294.786	1294.786
		Storage	-	1	295.804														1289.380	650.096			2235.28	2235.28
3	Meja *Quality Control*	*Finishing*	3	1																650.096	689.202		1339.299	1339.299
		Storage	-	1	295.804														1289.380	1300.192	689.202		3574.578	3574.578
		Meja Inspeksi	1	1															644.690	1300.192	689.202		2634.085	2634.085
-	Tempat Penyimpanan	Meja *Quality Control*	3	1																	689.202	648.074	1337.277	1337.277

LAMPIRAN K

OMH PROSES AWAL, NON DUPLIKASI AWAL, DUPLIKASI AWAL DAN OPTIMASI AWAL

Tabel K.1
OMH *Process Inflow*

No	Aliran		Komponen	Frekuensi	Luas		d	c	AMH	OMH	OMH Antar
	Dari	Ke		/Tahun	Dari	Ke					Depatermen
1	*Bending* 30T	CO2 *Welding*	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945
2	*Bending* 30T	CO2 *Welding*	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	
3	*Bending* 30T	Pencelupan	*Joint* Dudukan *Afdeck*	235	280125	2251500	2662.237	Rp 0.50	*Handtrolley*	Rp 312,003	Rp 1,248,012
4	*Bending* 30T	Pencelupan	Kait Gembok *Body*	235	280125	2251500	2662.237	Rp 0.50	*Handtrolley*	Rp 312,003	
5	*Bending* 30T	Pencelupan	Dudukan 260 - 2mm	235	280125	2251500	2662.237	Rp 0.50	*Handtrolley*	Rp 312,003	
6	*Bending* 30T	Pencelupan	SP Pintu	235	280125	2251500	2662.237	Rp 0.50	*Handtrolley*	Rp 312,003	
7	*Bending* 40T	CO2 *Welding*	*Body*	1175	369812.5	465000	2093.541	Rp 0.50	*Handtrolley*	Rp 1,226,771	Rp 2,208,188
8	*Bending* 40T	CO2 *Welding*	*Body* Atas Bawah	235	369812.5	465000	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
9	*Bending* 40T	CO2 *Welding*	Pintu	705	369812.5	465000	2093.541	Rp 0.50	*Handtrolley*	Rp 736,063	
10	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	Rp 2,208,188
11	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
12	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
13	*Bending* 40T	Pencelupan	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
14	*Bending* 40T	Pencelupan	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
15	*Bending* 40T	Pencelupan	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
16	*Bending* 40T	Pencelupan	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	
17	*Bending* 40T	Pencelupan	*Mounting Plate*	470	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 490,708	
18	CNC	*Bending* 30T	*Joint* Dudukan *Afdeck*	1175	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 476,224	Rp 1,047,694
19	CNC	*Bending* 30T	Kait Gembok *Body*	235	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
20	CNC	*Bending* 30T	Dudukan 260 - 2mm	235	1201500	2251500	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
21	CNC	*Bending* 30T	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
22	CNC	*Bending* 30T	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
23	CNC	*Bending* 30T	SP Pintu	470	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 190,490	
24	CNC	*Bending* 40T	*Body*	235	1201500	280125	1381.394	Rp 0.50	*Handtrolley*	Rp 161,894	Rp 971,361
25	CNC	*Bending* 40T	*Body* Atas Bawah	705	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 485,681	
26	CNC	*Bending* 40T	*Mounting Plate*	235	1201500	280125	1381.394	Rp 0.50	*Handtrolley*	Rp 161,894	
27	CNC	*Bending* 40T	Pintu	235	1201500	280125	1381.394	Rp 0.50	*Handtrolley*	Rp 161,894	
28	CNC	Pencelupan	*Green Plat*	235	1201500	280125	3474.936	Rp 0.50	*Handtrolley*	Rp 407,248	Rp 407,248
29	CO2 *Welding*	Gurinda	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240
30	CO2 *Welding*	Gurinda	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264	
31	*Finishing*	Meja *Quality Control*	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549
32	Gurinda	Pencelupan	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405
33	Gurinda	Pencelupan	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823	
34	*Handspray*	*Oven*	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246	Rp 314,649
35	*Handspray*	*Oven*	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649	
36	*Handspray*	*Oven*	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
37	*Handspray*	*Oven*	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
38	*Handspray*	*Oven*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
39	*Handspray*	*Oven*	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
40	*Handspray*	*Oven*	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
41	*Handspray*	*Oven*	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
42	*Handspray*	*Oven*	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
43	*Handspray*	*Oven*	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
44	*Handspray*	*Oven*	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
45	*Handspray*	*Oven*	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
46	*Handspray*	*Oven*	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
47	*Handspray*	*Oven*	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
48	*Handspray*	*Oven*	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
49	Meja Inspeksi	*Finishing*	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152	Rp 4,248,816
50	Meja Inspeksi	*Finishing*	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
51	Meja Inspeksi	*Finishing*	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
52	Meja Inspeksi	*Finishing*	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
53	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
54	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
55	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
56	Meja Inspeksi	*Finishing*	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
57	Meja Inspeksi	*Finishing*	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
58	Meja Inspeksi	*Finishing*	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
59	Meja Inspeksi	*Finishing*	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
60	Meja Inspeksi	*Finishing*	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487	
61	Meja Inspeksi	*Finishing*	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
62	Meja Inspeksi	Meja *Quality Control*	*Sub Assembly* 2	470	1662500	1900000	2630.040	Rp 0.50	*Handtrolley*	Rp 616,459	Rp 924,689
63	Meja Inspeksi	Meja *Quality Control*	SP Pintu	235	1662500	1900000	2630.040	Rp 0.50	*Handtrolley*	Rp 308,230	
64	Meja *Quality Control*	Tempat Penyimpanan	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914
65	*Oven*	Meja Inspeksi	*Sub Assembly* 1	1175	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 1,418,125	Rp 5,672,498
66	*Oven*	Meja Inspeksi	*Green Plat*	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
67	*Oven*	Meja Inspeksi	*Joint* Dudukan *Afdeck*	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
68	*Oven*	Meja Inspeksi	Kait Gembok *Body*	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
69	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
70	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
71	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
72	*Oven*	Meja Inspeksi	*Afdeck* A1 - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
73	*Oven*	Meja Inspeksi	*Afdeck* A2 - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
74	*Oven*	Meja Inspeksi	*Afdeck* C1 - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
75	*Oven*	Meja Inspeksi	*Afdeck* C2 - 1.2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
76	*Oven*	Meja Inspeksi	*Mounting Plate*	470	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 567,250	
77	*Oven*	Meja Inspeksi	Dudukan 260 - 2mm	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
78	*Oven*	Meja Inspeksi	*Sub Assembly* 2	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	
79	*Oven*	Meja Inspeksi	SP Pintu	235	918750	1662500	2420.095	Rp 0.50	*Handtrolley*	Rp 283,625	

Tabel K.1
OMH *Process Inflow* (Lanjutan)

80	Pencelupan	*Handspray*	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	
81	Pencelupan	*Handspray*	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843	
82	Pencelupan	*Handspray*	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718	
83	Pencelupan	*Handspray*	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718	
84	Pencelupan	*Handspray*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
85	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
86	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
87	Pencelupan	*Handspray*	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190
88	Pencelupan	*Handspray*	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
89	Pencelupan	*Handspray*	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
90	Pencelupan	*Handspray*	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
91	Pencelupan	*Handspray*	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
92	Pencelupan	*Handspray*	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590	
93	Pencelupan	*Handspray*	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	
94	Pencelupan	*Handspray*	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590	
95	Penyimpanan Plat	CNC	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
96	Penyimpanan Plat	CNC	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
97	Penyimpanan Plat	CNC	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
98	Penyimpanan Plat	CNC	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
99	Penyimpanan Plat	CNC	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
100	Penyimpanan Plat	CNC	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043
101	Penyimpanan Plat	CNC	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
102	Penyimpanan Plat	CNC	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
103	Penyimpanan Plat	CNC	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
104	Penyimpanan Plat	CNC	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
105	Penyimpanan Plat	CNC	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	
106	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
107	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
108	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
109	Penyimpanan Plat	*Shearing*	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500
110	Penyimpanan Plat	*Shearing*	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
111	Penyimpanan Plat	*Shearing*	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
112	Penyimpanan Plat	*Shearing*	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	
113	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	2282.269	Rp 0.50	*Handtrolley*	Rp 267,472	
114	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	2282.269	Rp 0.50	*Handtrolley*	Rp 267,472	Rp 802,417
115	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	2282.269	Rp 0.50	*Handtrolley*	Rp 267,472	
116	*Punch* 25T	*Bending* 40T	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	1828.868	Rp 0.50	*Handtrolley*	Rp 214,336	
117	*Punch* 25T	*Bending* 40T	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	1828.868	Rp 0.50	*Handtrolley*	Rp 214,336	Rp 857,342
118	*Punch* 25T	*Bending* 40T	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	1828.868	Rp 0.50	*Handtrolley*	Rp 214,336	
119	*Punch* 25T	*Bending* 40T	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	1828.868	Rp 0.50	*Handtrolley*	Rp 214,336	
120	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	
121	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558
122	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	
123	*Shearing*	*Punch* 25T	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	
124	*Shearing*	*Punch* 25T	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291
125	*Shearing*	*Punch* 25T	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	
126	*Shearing*	*Punch* 25T	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	
127	*Storage*	*Finishing*	*Handle* 75	2820	350000	1690500	3531.428	Rp 0.36	Operator	Rp 3,632,326	
128	*Storage*	*Finishing*	Baut *Hex* M6x35	940	350000	1690500	3531.428	Rp 0.36	Operator	Rp 1,210,775	
129	*Storage*	*Finishing*	Baut M6x30	705	350000	1690500	3531.428	Rp 0.36	Operator	Rp 908,081	
130	*Storage*	*Finishing*	Baut JF M5x10	470	350000	1690500	3531.428	Rp 0.36	Operator	Rp 605,388	
131	*Storage*	*Finishing*	Mur M6	705	350000	1690500	3531.428	Rp 0.36	Operator	Rp 908,081	
132	*Storage*	*Finishing*	Ring *Plat* M6	1175	350000	1690500	3531.428	Rp 0.36	Operator	Rp 1,513,469	Rp 12,713,141
133	*Storage*	*Finishing*	Ring Per M6	1175	350000	1690500	3531.428	Rp 0.36	Operator	Rp 1,513,469	
134	*Storage*	*Finishing*	Baut M5x10	470	350000	1690500	3531.428	Rp 0.36	Operator	Rp 605,388	
135	*Storage*	*Finishing*	Ring Plat M5	705	350000	1690500	3531.428	Rp 0.36	Operator	Rp 908,081	
136	*Storage*	*Finishing*	Baut M6x10	705	350000	1690500	3531.428	Rp 0.36	Operator	Rp 908,081	
137	*Storage*	Meja *Quality Control*	*Handle Push* Jadul	1410	350000	1900000	2281.155	Rp 0.36	Operator	Rp 1,173,165	
138	*Storage*	Meja *Quality Control*	Engsel Hitam Kecil	1410	350000	1900000	2281.155	Rp 0.36	Operator	Rp 1,173,165	
139	*Storage*	Meja *Quality Control*	Baut M6x15 Multifungsi	235	350000	1900000	2281.155	Rp 0.36	Operator	Rp 195,528	
140	*Storage*	Meja *Quality Control*	Baut M6x10 Multifungsi	235	350000	1900000	2281.155	Rp 0.36	Operator	Rp 195,528	Rp 4,301,606
141	*Storage*	Meja *Quality Control*	Mur M6	470	350000	1900000	2281.155	Rp 0.36	Operator	Rp 391,055	
142	*Storage*	Meja *Quality Control*	Ring *Plat* M6	705	350000	1900000	2281.155	Rp 0.36	Operator	Rp 586,583	
143	*Storage*	Meja *Quality Control*	Ring Per M6	705	350000	1900000	2281.155	Rp 0.36	Operator	Rp 586,583	
Total OMH *By Process Inflow*										Rp 64,351,484	Rp 64,351,484

Tabel K.2
OMH *Non* Duplikasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	Rp 6,264,500
2	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
3	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
4	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
5	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
6	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
7	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
8	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp10,895,043	Rp10,895,043
9	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
10	-	Penyimpanan Plat	CNC	2	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
11	-	Penyimpanan Plat	CNC	2	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
12	-	Penyimpanan Plat	CNC	2	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
13	-	Penyimpanan Plat	CNC	2	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
14	-	Penyimpanan Plat	CNC	2	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
15	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
16	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
17	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
18	-	Penyimpanan Plat	CNC	2	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145	Rp 8,047,007	Rp14,787,641
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355	Rp 6,740,634	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834	Rp 401,501	Rp11,226,049
37	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
39	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787	
40	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343	
44	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584	Rp 462,338	
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
50	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 646,095	Rp 1,162,971	
51	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 129,219		
52	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 387,657		
53	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354	Rp 2,208,188	
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
56	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 245,354		
60	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	2093.541	Rp 0.50	*Handtrolley*	Rp 490,708		
61	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
62	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
63	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
64	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
65	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
66	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
67	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
68	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
69	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
70	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
78	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel K.2
OMH *Non* Duplikasi *Outflow* (Lanjutan)

80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246	Rp 314,649	Rp 11,226,049
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609	Rp 2,634,437	
96	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
97	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
98	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
103	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
107	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
109	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	2	CNC	*Bending* 40T	1	*Body*	1175	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 499,328	Rp 1,098,521	Rp 2,782,965
111	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 99,866		
112	2	CNC	*Bending* 40T	1	*Mounting Plate*	470	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 199,731		
113	2	CNC	*Bending* 40T	1	Pintu	705	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 299,597		
114	2	CNC	Pencelupan	1	*Green Plat*	235	1201500	2251500	2866.814	Rp 0.50	*Handtrolley*	Rp 335,978	Rp 335,978	
115	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	1644.819	Rp 0.50	*Handtrolley*	Rp 192,766	Rp 385,532	
116	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	1644.819	Rp 0.50	*Handtrolley*	Rp 192,766		
117	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734	Rp 962,934	
118	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
119	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
120	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
121	2	CNC	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 571,469	Rp 571,469
122	2	CNC	*Bending* 30T	2	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
123	2	CNC	*Bending* 30T	2	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
124	2	CNC	*Bending* 30T	2	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
125	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
126	2	CNC	*Bending* 30T	2	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152	Rp 4,248,816	Rp 5,174,927
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Non Duplikasi Outflow*												Rp 56,514,058	Rp 56,514,058	Rp 56,514,058

Tabel K.3
OMH *Non* Duplikasi *Inflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198	Rp 14,526,383	Rp 14,526,383
2	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
3	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
4	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
5	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
6	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
7	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	1827.218	Rp 0.81	*Handlift*	Rp 2,075,198		
8	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043	Rp 10,895,043
9	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
10	-	Penyimpanan Plat	CNC	2	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
11	-	Penyimpanan Plat	CNC	2	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
12	-	Penyimpanan Plat	CNC	2	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
13	-	Penyimpanan Plat	CNC	2	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
14	-	Penyimpanan Plat	CNC	2	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
15	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
16	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
17	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
18	-	Penyimpanan Plat	CNC	2	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145	Rp 8,047,007	Rp 14,787,641
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355	Rp 6,740,634	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	Rp 12,678,593
37	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291	
40	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
44	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 909,333	Rp 1,636,800	
51	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 181,867		
52	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 545,600		
53	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100	Rp 3,186,902	
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
56	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
60	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 708,201		
61	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
62	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
63	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
64	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
65	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
66	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
67	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
68	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
69	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
70	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
78	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

No	Sel	Aliran		Sel	Komponen	Frekuensi	Luas		d	c	AMH	OMH	OMH Antar	OMH Antar Sel
		Dari	Ke			/Tahun	Dari	Ke					Depatermen	
80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		Rp12,678,593
96	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
97	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
98	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
103	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
107	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
109	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	2	CNC	*Bending* 40T	1	*Body*	1175	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 809,468		
111	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 161,894	Rp 1,780,829	
112	2	CNC	*Bending* 40T	1	*Mounting Plate*	470	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 323,787		
113	2	CNC	*Bending* 40T	1	Pintu	705	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 485,681		
114	2	CNC	Pencelupan	1	*Green Plat*	235	1201500	2251500	3265.446	Rp 0.50	*Handtrolley*	Rp 382,696	Rp 382,696	
115	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	2120.514	Rp 0.50	*Handtrolley*	Rp 248,515	Rp 497,031	Rp 4,343,552
116	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	2120.514	Rp 0.50	*Handtrolley*	Rp 248,515		
117	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
118	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749	Rp 1,682,996	
119	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
120	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
121	2	CNC	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
122	2	CNC	*Bending* 30T	2	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
123	2	CNC	*Bending* 30T	2	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 571,469	Rp 571,469
124	2	CNC	*Bending* 30T	2	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
125	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
126	2	CNC	*Bending* 30T	2	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Non Duplikasi Inflow*												Rp 67,789,070	Rp67,789,070	Rp67,789,070

Tabel K.4
OMH Duplikasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419	Rp 10,130,512	
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		Rp 16,395,013
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	CNC (Dup)	Bending 30T (Dup)	1	Joint Dudukan Afdeck	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
37	1	CNC (Dup)	Bending 30T (Dup)	1	Kait Gembok Body	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 305,728	
38	1	CNC (Dup)	Bending 30T (Dup)	1	Dudukan 260 - 2mm	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
39	1	CNC (Dup)	Bending 30T (Dup)	1	SP Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
40	1	CNC (Dup)	Bending 40T	1	*Mounting Plate*	470	600750	369812.5	1140.830	Rp 0.50	*Handtrolley*	Rp 267,401	Rp 267,401	
41	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
42	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
44	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
45	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
48	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
49	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
50	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
51	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
52	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
53	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
54	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
55	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
56	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
57	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	Rp 12,607,540
58	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
59	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
60	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
61	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
62	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
63	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
64	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
65	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
66	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
67	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
68	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
69	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
70	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
71	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
72	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
73	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
74	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
75	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
76	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
77	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
78	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
79	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		

Tabel K.4
OMH Duplikasi *Outflow* (Lanjutan)

80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246			
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649			
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664			
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664			
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649		
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318			
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977			
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318			
95	1	Bending 30T (Dup)	Pencelupan	1	Joint Dudukan Afdeck	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857			
96	1	Bending 30T (Dup)	Pencelupan	1	Kait Gembok Body	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857	Rp 795,428		
97	1	Bending 30T (Dup)	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857			
98	1	Bending 30T (Dup)	Pencelupan	1	SP Pintu	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857			Rp 12,607,540
99	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
100	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
101	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
102	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506	Rp 2,389,551		
103	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
104	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
105	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506			
106	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 531,011			
107	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	2348.968	Rp 0.50	*Handtrolley*	Rp 275,289	Rp 275,289		
108	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 1,829,917	Rp 2,058,657		
109	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 228,740			
110	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186			
111	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558		
112	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186			
113	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323			
114	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291		
115	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323			
116	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323			
117	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945		
118	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972			
119	2	*Bending* 40T (Dup)	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 688,106			Rp 1,380,535
120	2	*Bending* 40T (Dup)	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 137,621	Rp 1,238,590		
121	2	*Bending* 40T (Dup)	CO2 *Welding*	1	Pintu	705	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 412,863			
122	2	CNC	*Bending* 40T (Dup)	2	*Body*	1175	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 405,264			
123	2	CNC	*Bending* 40T (Dup)	2	*Body* Atas Bawah	235	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 81,053	Rp 729,475		
124	2	CNC	*Bending* 40T (Dup)	2	Pintu	705	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 243,158			Rp 1,024,878
125	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701	Rp 295,403		
126	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701			
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152			
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816		
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			Rp 5,174,927
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487			
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743			
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111		
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704			
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549	
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914	
Total OMH *Duplikasi Outflow*												Rp 60,222,738	Rp 60,222,738	Rp 60,222,738	

Tabel K.5
OMH Optimasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419	Rp 10,130,512	
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	1486.658	Rp 0.81	*Handlift*	Rp 1,688,419		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		Rp 16,395,013
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	470	600750	369812.5	1619.502	Rp 0.50	*Handtrolley*	Rp 379,598	Rp 379,598	
37	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	3713.044	Rp 0.50	*Handtrolley*	Rp 435,153	Rp 435,153	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
39	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
40	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 724,288	
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
43	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
44	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
46	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343	
47	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584	Rp 462,338	
50	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
51	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	986.250	Rp 0.50	*Handtrolley*	Rp 115,584		
52	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 646,095		
53	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 129,219	Rp 1,162,971	
62	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1102.591	Rp 0.50	*Handtrolley*	Rp 387,657		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
56	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387	Rp 1,776,479	Rp 11,609,091
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
60	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 197,387		
61	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1684.246	Rp 0.50	*Handtrolley*	Rp 394,773		
63	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
64	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
65	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
66	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
67	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
68	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
69	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
70	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	
75	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
78	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
80	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
81	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel K.5
OMH Optimasi *Outflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
82	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
83	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
84	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
85	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
90	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
93	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
96	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 11,609,091
97	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
98	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
103	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
107	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
109	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
111	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
112	1	CNC (Dup)	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	600750	280125	2963.278	Rp 0.50	*Handtrolley*	Rp 347,284		
113	1	CNC (Dup)	*Bending* 30T	2	Kait Gembok *Body*	235	600750	280125	2963.278	Rp 0.50	*Handtrolley*	Rp 347,284	Rp 1,389,135	Rp 1,389,135
114	1	CNC (Dup)	*Bending* 30T	2	Dudukan 260 - 2mm	235	600750	280125	2963.278	Rp 0.50	*Handtrolley*	Rp 347,284		
115	1	CNC (Dup)	*Bending* 30T	2	SP Pintu	235	600750	280125	2963.278	Rp 0.50	*Handtrolley*	Rp 347,284		
116	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
117	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
118	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
119	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
120	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
121	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
122	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
123	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
124	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
125	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
126	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
127	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
128	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
130	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
131	2	CNC	*Bending* 40T	1	*Body*	1175	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 405,264		
132	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 81,053	Rp 729,475	
133	2	CNC	*Bending* 40T	1	Pintu	705	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 243,158		
134	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	1644.819	Rp 0.50	*Handtrolley*	Rp 192,766	Rp 385,532	
135	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	1644.819	Rp 0.50	*Handtrolley*	Rp 192,766		Rp 2,077,941
136	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
137	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734	Rp 962,934	
138	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
139	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	2054.115	Rp 0.50	*Handtrolley*	Rp 240,734		
140	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 152,864	Rp 152,864
141	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Optimasi Outflow*												Rp 60,438,816	Rp 60,438,816	Rp 60,438,816

Tabel K.6
OMH Optimasi *Inflow*

OMH *Optimasi Inflow*														
No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169		
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169	Rp 17,881,016	
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	2624.048	Rp 0.81	*Handlift*	Rp 2,980,169		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		Rp 30,307,407
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199	Rp 12,426,391	
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	470	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 162,106	Rp 162,106	
37	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	3713.044	Rp 0.50	*Handtrolley*	Rp 435,153	Rp 435,153	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	
40	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291	
43	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
44	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
46	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
47	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
50	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
51	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
52	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 909,333		
53	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 181,867	Rp 1,636,800	
62	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1551.819	Rp 0.50	*Handtrolley*	Rp 545,600		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
56	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100	Rp 3,186,902	Rp 13,275,851
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
60	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 354,100		
61	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	3021.442	Rp 0.50	*Handtrolley*	Rp 708,201		
63	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
64	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
65	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405	
66	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823		
67	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
68	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
69	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
70	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	
75	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
78	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
80	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
81	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel K.6
OMH Optimasi *Inflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
82	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
83	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
84	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
85	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
90	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
93	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
96	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 13,275,851
97	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
98	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
103	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
107	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
109	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
111	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
112	1	CNC (Dup)	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701		
113	1	CNC (Dup)	*Bending* 30T	2	Kait Gembok *Body*	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701	Rp 590,806	Rp 590,806
114	1	CNC (Dup)	*Bending* 30T	2	Dudukan 260 - 2mm	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701		
115	1	CNC (Dup)	*Bending* 30T	2	SP Pintu	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701		
116	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
117	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
118	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
119	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
120	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
121	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
122	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
123	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
124	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
125	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
126	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
127	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
128	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
130	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
131	2	CNC	*Bending* 40T	1	*Body*	1175	600750	369812.5	1220.870	Rp 0.50	*Handtrolley*	Rp 715,404		
132	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	600750	369812.5	1220.870	Rp 0.50	*Handtrolley*	Rp 143,081	Rp 1,287,727	
133	2	CNC	*Bending* 40T	1	Pintu	705	600750	369812.5	1220.870	Rp 0.50	*Handtrolley*	Rp 429,242		
134	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	2120.514	Rp 0.50	*Handtrolley*	Rp 248,515	Rp 497,031	
135	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	2120.514	Rp 0.50	*Handtrolley*	Rp 248,515		Rp 3,467,753
136	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
137	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749	Rp 1,682,996	
138	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
139	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	3590.138	Rp 0.50	*Handtrolley*	Rp 420,749		
140	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 152,864	Rp 152,864
141	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Optimasi Inflow*												Rp 76,609,455	Rp 76,609,455	Rp 76,609,455

LAMPIRAN L

From to Chart

Perbaikan

Tabel L.1
FTC *Process Inflow*

From to Chart By Process Inflow																	
From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.750	0.563	0	1.313
Penyimpanan Plat	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CNC	0	0		0	0	0	1	0.369	0	0	0.078	0	0	0	0	0	0	1.447
Shearing	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0		0	0	0.305	0	0	0	0	0	0	0	0	0	0.305
Punch 25T	0	0	0	0	0		0	0.326	0	0	0	0	0	0	0	0	0	0.326
Bending 30T	0	0	0	0	0	0		0	0.060	0	0.240	0	0	0	0	0	0	0.300
Bending 40T	0	0	0	0	0	0	0		0.940	0	0.424	0	0	0	0	0	0	1.364
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		0.257	0	0	0	0	0	0	0.257
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.250	0.121	0	0.372
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.315	0	0.315
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel L.2
FTC *Non* Duplikasi Keseluruhan

From \ To	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 8,047,007	Rp 6,740,634	Rp -	Rp 14,787,641
Penyimpanan Plat	Rp -		Rp 10,895,043	Rp 6,264,500	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 17,159,544
CNC	Rp -	Rp -		Rp -	Rp -	Rp -	Rp 571,469	Rp 1,098,521	Rp -	Rp -	Rp 335,978	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 2,005,969
Shearing	Rp -	Rp -	Rp -		Rp 401,501	Rp 322,787	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 724,288
Punch 16T	Rp -	Rp -	Rp -	Rp -		Rp -	Rp -	Rp 187,343	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 187,343
Punch 25T	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 462,338	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 462,338
Bending 30T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 385,532	Rp -	Rp 962,934	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,348,466
Bending 40T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,162,971	Rp -	Rp 2,208,188	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 3,371,159
CO2 *Welding*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,753,240	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,753,240
Gurinda	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,339,405	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,339,405
Pencelupan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 439,190	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 439,190
Handspray	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 314,649	Rp -	Rp -	Rp -	Rp -	Rp 314,649
Oven	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,634,437	Rp -	Rp -	Rp -	Rp 2,634,437
Meja Inspeksi	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 4,248,816	Rp 926,111	Rp -	Rp 5,174,927
Finishing	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,407,549	Rp -	Rp 2,407,549
Meja *Quality Control*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -
Total	Rp -	Rp -	Rp 10,895,043	Rp 6,264,500	Rp 401,501	Rp 322,787	Rp 571,469	Rp 1,748,201	Rp 1,548,502	Rp 1,753,240	Rp 4,846,506	Rp 439,190	Rp 314,649	Rp 2,634,437	Rp 12,295,824	Rp 10,074,293	Rp 2,403,914	Rp 56,514,058

Tabel L.3
FTC *Non* Duplikasi *Outflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.544	0.456	0	1
Penyimpanan Plat	0		0.635	0.365	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0.285	0.548	0	0	0.167	0	0	0	0	0	0	1
Shearing	0	0	0		0.554	0.446	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0		0	1	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0		0	0.286	0	0.714	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0		0.345	0	0.655	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.821	0.179	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.635	0.365	0.554	0.446	0.285	2.548	0.631	1	2.537	1	1	1	1.365	1.635	1	

Tabel L.4
FTC *Non* Duplikasi *Inflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0.654	0.669	0	1.324
Penyimpanan Plat	0		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
CNC	0	0		0	0	0	1	0.628	0	0	0.069	0	0	0	0	0	0	1.698
Shearing	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0		0	0	0.107	0	0	0	0	0	0	0	0	0	0.107
Punch 25T	0	0	0	0	0		0	0.264	0	0	0	0	0	0	0	0	0	0.264
Bending 30T	0	0	0	0	0	0		0	0.249	0	0.199	0	0	0	0	0	0	0.448
Bending 40T	0	0	0	0	0	0	0		0.751	0	0.456	0	0	0	0	0	0	1.207
CO2 *Welding*	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0		0.276	0	0	0	0	0	0	0.276
Pencelupan	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0		0.346	0.092	0	0.437
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.239	0	0.239
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel L.5
FTC Antar Sel *Non* Duplikasi Keseluruhan

From to Chart Antar Sel *Non Duplikasi*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 14,787,641		Rp 14,787,641
Penyimpanan Plat			Rp 6,264,500	Rp 10,895,043			Rp 17,159,544
Sel 1					Rp 5,174,927		Rp 5,174,927
Sel 2			Rp 2,782,965				Rp 2,782,965
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 9,047,466	Rp 10,895,043	Rp 19,962,568	Rp 2,403,914	Rp 42,308,991

Tabel L.6
FTC Antar Sel *Non* Duplikasi *Outflow*

From to Chart Antar Sel *Non Duplikasi Outflow*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.365	0.635	0	0	1
Sel 1	0	0		0	1	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	0.214	0.258	0.472	0.057	

Tabel L.7
FTC Antar Sel *Non* Duplikasi *Inflow*

From to Chart Antar Sel *Non Duplikasi Inflow*							
From \ *To*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.741	0	0.741
Penyimpanan Plat	0		0.692	1	0	0	1.692
Sel 1	0	0		0	0.259	0	0.259
Sel 2	0	0	0.308		0	0	0.308
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

Tabel L.8
FTC Duplikasi *Outflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.544	0.456	0	1
Penyimpanan Plat	0		0.198	0.496	0.307	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0	0.288	0	0	0.712	0	0	0	0	0	0	0	0	0	1
CNC (Dup)	0	0	0		0	0	0	0	0.360	0.315	0	0	0	0.324	0	0	0	0	0	0	1
Shearing	0	0	0	0		0.312	0.688	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	0	0	1
Bending 30T (Dup)	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	0	0	1
Bending 40T (Dup)	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.821	0.179	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.198	0.496	0.307	0.312	0.688	0.288	0.360	2.315	0.712	2	1	3.324	1	1	1	1.365	1.635	1	

Tabel L.9
FTC Antar Sel Duplikasi Keselurahan

From to Chart Antar Sel *Duplikasi*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 14,787,641		Rp 14,787,641
Penyimpanan Plat			Rp 16,395,013	Rp 4,040,743			Rp 20,435,756
Sel 1					Rp 5,174,927		Rp 5,174,927
Sel 2			Rp 1,380,535				Rp 1,380,535
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 17,775,548	Rp 4,040,743	Rp 19,962,568	Rp 2,403,914	Rp 44,182,772

Tabel L.10
FTC Antar Sel Duplikasi *Outflow*

From to Chart Antar Sel *Duplikasi Outflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.802	0.198	0	0	1
Sel 1	0	0		0	1	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1.802	0.198	2	1	

Tabel L.11
FTC Antar Sel Duplikasi *Inflow*

From to Chart Antar Sel *Duplikasi Inflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.741	0	0.741
Penyimpanan Plat	0		0.922	1	0	0	1.922
Sel 1	0	0		0	0.259	0	0.259
Sel 2	0	0	0.078		0	0	0.078
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

Tabel L12
FTC Optimasi Keseluruhan

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 8,047,007	Rp 6,740,634	Rp -	Rp 14,787,641
Penyimpanan Plat	Rp -		Rp 4,040,743	Rp 10,130,512	Rp 6,264,500	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 20,435,756
CNC	Rp -	Rp -		Rp -	Rp -	Rp -	Rp -	Rp 152,864	Rp 729,475	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 882,339
CNC (Dup)	Rp -	Rp -	Rp -		Rp -	Rp -	Rp -	Rp 1,389,135	Rp 379,598	Rp -	Rp -	Rp 435,153	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 2,203,885
Shearing	Rp -	Rp -	Rp -	Rp -		Rp 401,501	Rp 322,787	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 724,288
Punch 16T	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp -	Rp 187,343	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 187,343
Punch 25T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 462,338	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 462,338
Bending 30T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -	Rp 385,532	Rp -	Rp 962,934	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,348,466
Bending 40T	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,162,971	Rp -	Rp 1,776,479	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 2,939,449
CO2 *Welding*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,753,240	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,753,240
Gurinda	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 1,339,405	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 1,339,405
Pencelupan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 439,190	Rp -	Rp -	Rp -	Rp -	Rp -	Rp 439,190
Handspray	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 314,649	Rp -	Rp -	Rp -	Rp -	Rp 314,649
Oven	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,634,437	Rp -	Rp -	Rp -	Rp 2,634,437
Meja Inspeksi	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 4,248,816	Rp 926,111	Rp -	Rp 5,174,927
Finishing	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,407,549	Rp -	Rp 2,407,549
Meja *Quality Control*	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -	Rp -		Rp -
Total	Rp -	Rp -	Rp 4,040,743	Rp 10,130,512	Rp 6,264,500	Rp 401,501	Rp 322,787	Rp 1,541,999	Rp 1,758,753	Rp 1,548,502	Rp 1,753,240	Rp 4,513,971	Rp 439,190	Rp 314,649	Rp 2,634,437	Rp 12,295,824	Rp 10,074,293	Rp 2,403,914	Rp 60,438,816

Tabel L.13
FTC Optimasi *Outflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.544	0.456	0	1
Penyimpanan Plat	0		0.198	0.496	0.307	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CNC	0	0		0	0	0	0	0.173	0.827	0	0	0	0	0	0	0	0	0	1
CNC (Dup)	0	0	0		0	0	0	0.630	0.172	0	0	0.197	0	0	0	0	0	0	1
Shearing	0	0	0	0		0.554	0.446	0	0	0	0	0	0	0	0	0	0	0	1
Punch 16T	0	0	0	0	0		0	0	1	0	0	0	0	0	0	0	0	0	1
Punch 25T	0	0	0	0	0	0		0	1	0	0	0	0	0	0	0	0	0	1
Bending 30T	0	0	0	0	0	0	0		0	0.286	0	0.714	0	0	0	0	0	0	1
Bending 40T	0	0	0	0	0	0	0	0		0.396	0	0.604	0	0	0	0	0	0	1
CO2 *Welding*	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	1
Pencelupan	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.821	0.179	0	1
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	1
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	0.198	0.496	0.307	0.554	0.446	0.804	2.999	0.682	1	2.516	1	1	1	1.365	1.635	1	

Tabel L.14
FTC Optimasi *Inflow*

From \ To	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.654	0.669	0	1.324
Penyimpanan Plat	0		1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
CNC	0	0		0	0	0	0	0.099	0.415	0	0	0	0	0	0	0	0	0	0.514
CNC (Dup)	0	0	0		0	0	0	0.901	0.216	0	0	0.096	0	0	0	0	0	0	1.213
Shearing	0	0	0	0		1	1	0	0	0	0	0	0	0	0	0	0	0	2
Punch 16T	0	0	0	0	0		0	0	0.107	0	0	0	0	0	0	0	0	0	0.107
Punch 25T	0	0	0	0	0	0		0	0.263	0	0	0	0	0	0	0	0	0	0.263
Bending 30T	0	0	0	0	0	0	0		0	0.249	0	0.213	0	0	0	0	0	0	0.462
Bending 40T	0	0	0	0	0	0	0	0		0.751	0	0.394	0	0	0	0	0	0	1.145
CO2 *Welding*	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0	0	1
Gurinda	0	0	0	0	0	0	0	0	0	0		0.297	0	0	0	0	0	0	0.297
Pencelupan	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	1
Handspray	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	1
Oven	0	0	0	0	0	0	0	0	0	0	0	0	0		1	0	0	0	1
Meja Inspeksi	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.346	0.092	0	0.437
Finishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0.239	0	0.239
Meja *Quality Control*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Total	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

Tabel L.15
FTC Antar Sel Keseluruhan Optimasi

From to Chart Antar Sel *Optimasi*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage					Rp 14,787,641		Rp 14,787,641
Penyimpanan Plat			Rp 16,395,013	Rp 4,040,743			Rp 20,435,756
Sel 1				Rp 1,389,135	Rp 5,174,927		Rp 6,564,062
Sel 2			Rp 2,077,941				Rp 2,077,941
Sel 3						Rp 2,403,914	Rp 2,403,914
Tempat Penyimpanan							Rp -
Total	Rp -	Rp -	Rp 18,472,953	Rp 5,429,877	Rp 19,962,568	Rp 2,403,914	Rp 46,269,312

Tabel L.16
FTC Antar Sel *Outflow* Optimasi

From to Chart Antar Sel *Optimasi Outflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	1	0	1
Penyimpanan Plat	0		0.802	0.198	0	0	1
Sel 1	0	0		0.212	0.788	0	1
Sel 2	0	0	1		0	0	1
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1.802	0.409	1.788	1	

Tabel L17
FTC Antar Sel *Inflow* Optimasi

From to Chart Antar Sel *Optimasi Inflow*							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage		0	0	0	0.741	0	0.741
Penyimpanan Plat	0		0.888	0.744	0	0	1.632
Sel 1	0	0		0.256	0.259	0	0.515
Sel 2	0	0	0.112		0	0	0.112
Sel 3	0	0	0	0		1	1
Tempat Penyimpanan	0	0	0	0	0		0
Total	0	0	1	1	1	1	

LAMPIRAN M

SKALA PRIORITAS PERBAIKAN

Tabel M.1
Skala Prioritas *By Process Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC			
	1			
Bending 40T	CNC	*Punch* 25T	*Punch* 16T	
	0.369	0.326	0.305	
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.940	0.060		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	*Bending* 40T	Gurinda	*Bending* 30T	CNC
	0.424	0.257	0.240	0.078
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	*Storage*	Meja Inspeksi		
	0.750	0.250		
Meja *Quality Control*	*Storage*	*Finishing*	Meja Inspeksi	
	0.563	0.315	0.121	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel M.2
Skal Prioritas *Non* Duplikasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.544	0.456	
Penyimpanan Plat	CNC	*Shearing*	
	0.635	0.365	
CNC	*Bending* 40T	*Bending* 30T	Pencelupan
	0.548	0.285	0.167
Shearing	*Punch* 16T	*Punch* 25T	
	0.554	0.446	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	Pencelupan	CO2 *Welding*	
	0.714	0.286	
Bending 40T	Pencelupan	CO2 *Welding*	
	0.655	0.345	
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.821	0.179	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel M.3
Skala Prioritas *Non* Duplikasi *Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC			
	1			
Bending 40T	CNC	*Punch* 25T	*Punch* 16T	
	0.628	0.264	0.107	
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.751	0.249		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	*Bending* 40T	Gurinda	*Bending* 30T	CNC
	0.456	0.276	0.199	0.069
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	*Storage*	Meja Inspeksi		
	0.654	0.346		
Meja *Quality Control*	*Storage*	*Finishing*	Meja Inspeksi	
	0.669	0.239	0.092	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel M.4
Skala Prioritas Antar Sel *Non* Duplikasi *Outflow*

Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 2	Sel 1
	0.635	0.365
Sel 1	Sel 3	
	1	
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel M.5
Skala Prioritas Antar Sel *Non* Duplikasi *Inflow*

Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.692	0.308
Sel 2	Penyimpanan Plat	
	1	
Sel 3	*Storage*	Sel 1
	0.741	0.259
Tempat Penyimpanan	Sel 3	
	1	

Tabel M.6
Skala Prioritas Duplikasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.544	0.456	
Penyimpanan Plat	CNC (Dup)	*Shearing*	CNC
	0.496	0.307	0.198
CNC	*Bending* 40T (Dup)	*Bending* 30T	
	0.712	0.288	
CNC (Dup)	*Bending* 30T (Dup)	Pencelupan	*Bending* 40T
	0.360	0.324	0.315
Shearing	*Punch* 25T	*Punch* 16T	
	0.688	0.312	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	CO2 *Welding*		
	1		
Bending 30T (Dup)	Pencelupan		
	1		
Bending 40T	Pencelupan		
	1		
Bending 40T (Dup)	CO2 *Welding*		
	1		
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.821	0.179	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel M.7
Skala Prioritas Antar Sel Duplikasi *Outflow*

Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 1	Sel 2
	0.802	0.198
Sel 1	Sel 3	
	1	
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel M.8
Skala Prioritas Antar Sel Duplikasi *Inflow*

Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.922	0.078
Sel 2	Penyimpanan Plat	
	1	
Sel 3	*Storage*	Sel 1
	0.741	0.259
Tempat Penyimpanan	Sel 3	
	1	

Tabel M.9
Skala Prioritas Optimasi *Outflow*

Storage	*Finishing*	Meja *Quality Control*	
	0.544	0.456	
Penyimpanan Plat	CNC (dup)	*Shearing*	CNC
	0.496	0.307	0.198
CNC	*Bending* 40T	*Bending* 30T	
	0.827	0.173	
CNC (Dup)	*Bending* 30T	Pencelupan	*Bending* 40T
	0.630	0.197	0.172
Shearing	*Punch* 16T	*Punch* 25T	
	0.554	0.446	
Punch 16T	*Bending* 40T		
	1		
Punch 25T	*Bending* 40T		
	1		
Bending 30T	Pencelupan	CO2 *Welding*	
	0.714	0.286	
Bending 40T	Pencelupan	CO2 *Welding*	
	0.604	0.396	
CO2 *Welding*	Gurinda		
	1		
Gurinda	Pencelupan		
	1		
Pencelupan	*Handspray*		
	1		
Handspray	Oven		
	1		
Oven	Meja Inspeksi		
	1		
Meja Inspeksi	*Finishing*	Meja *Quality Control*	
	0.821	0.179	
Finishing	Meja *Quality Control*		
	1		
Meja *Quality Control*	Tempat Penyimpanan		
	1		
Tempat Penyimpanan			

Tabel M.10
Skala Prioritas Optimasi *Inflow*

Storage				
Penyimpanan Plat				
CNC	Penyimpanan Plat			
	1			
CNC (Dup)	Penyimpanan Plat			
	1			
Shearing	Penyimpanan Plat			
	1			
Punch 16T	*Shearing*			
	1			
Punch 25T	*Shearing*			
	1			
Bending 30T	CNC (Dup)	CNC		
	0.901	0.099		
Bending 40T	CNC	*Punch* 25T	CNC (Dup)	*Punch* 16T
	0.415	0.263	0.216	0.107
CO2 *Welding*	*Bending* 40T	*Bending* 30T		
	0.751	0.249		
Gurinda	CO2 *Welding*			
	1			
Pencelupan	*Bending* 40T	Gurinda	*Bending* 30T	CNC (Dup)
	0.394	0.297	0.213	0.096
Handspray	Pencelupan			
	1			
Oven	*Handspray*			
	1			
Meja Inspeksi	Oven			
	1			
Finishing	*Storage*	Meja Inspeksi		
	0.654	0.346		
Meja *Quality Control*	*Storage*	*Finishing*	Meja Inspeksi	
	0.669	0.239	0.092	
Tempat Penyimpanan	Meja *Quality Control*			
	1			

Tabel M.11
Skala Prioritas Antar Sel Optimasi *Outflow*

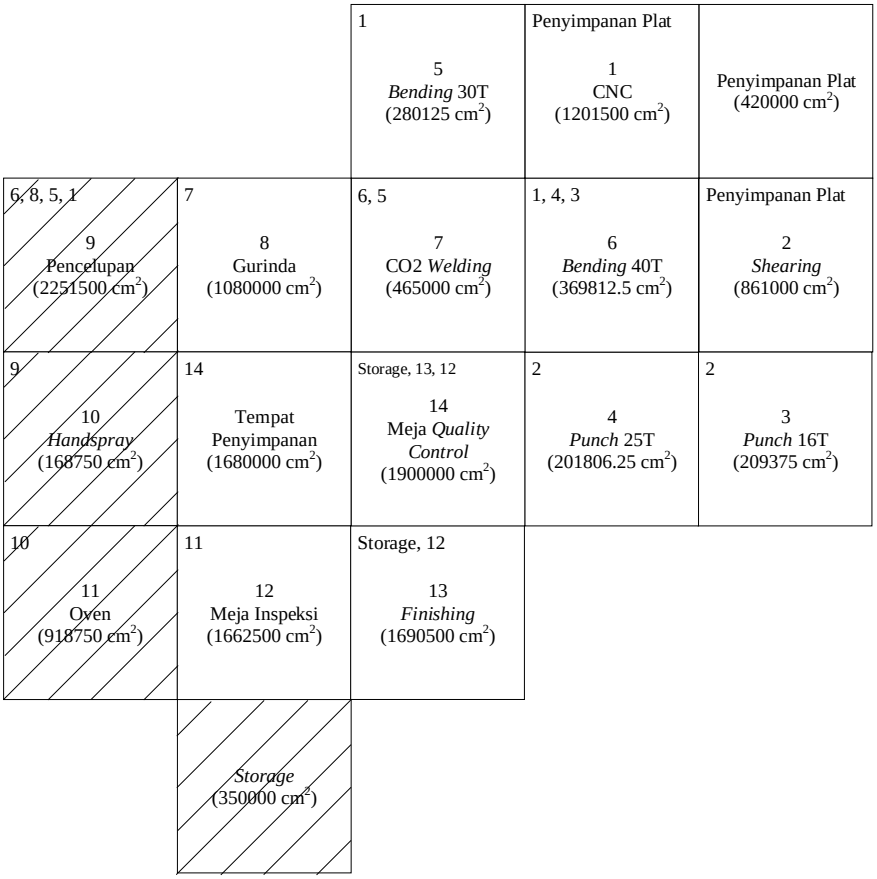
Storage	Sel 3	
	1	
Penyimpanan Plat	Sel 1	Sel 2
	0.802	0.198
Sel 1	Sel 3	Sel 2
	0.788	0.212
Sel 2	Sel 1	
	1	
Sel 3	Tempat Penyimpanan	
	1	
Tempat Penyimpanan		

Tabel M.12
Skala Prioritas Antar Sel Optimasi *Inflow*

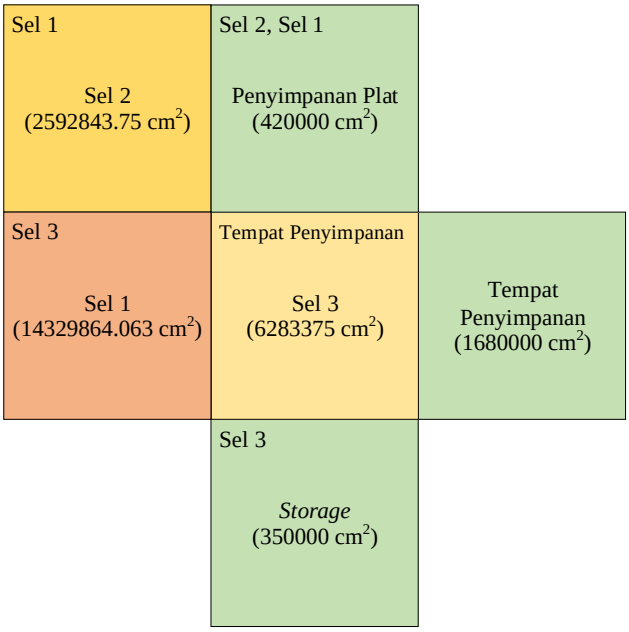
Storage		
Penyimpanan Plat		
Sel 1	Penyimpanan Plat	Sel 2
	0.888	0.112
Sel 2	Penyimpanan Plat	Sel 1
	0.744	0.256
Sel 3	*Storage*	Sel 1
	0.741	0.259
Tempat Penyimpanan	Sel 3	
	1	

LAMPIRAN N

ARD PERBAIKAN

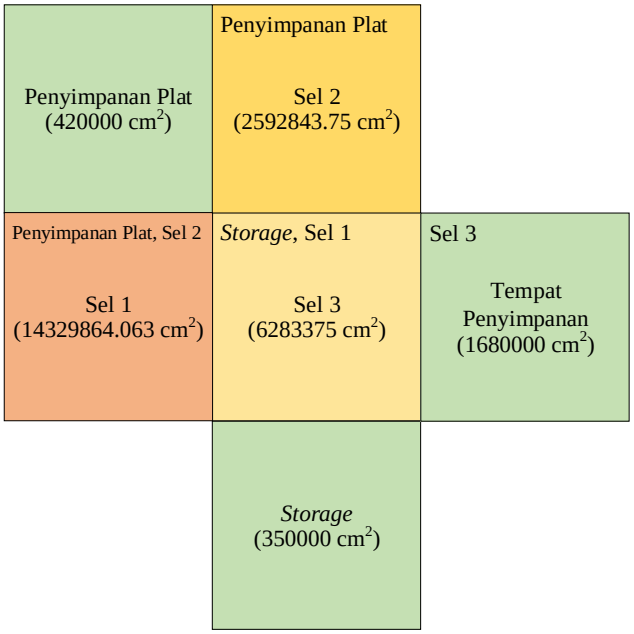


Gambar N.1
ARD *Process Inflow*

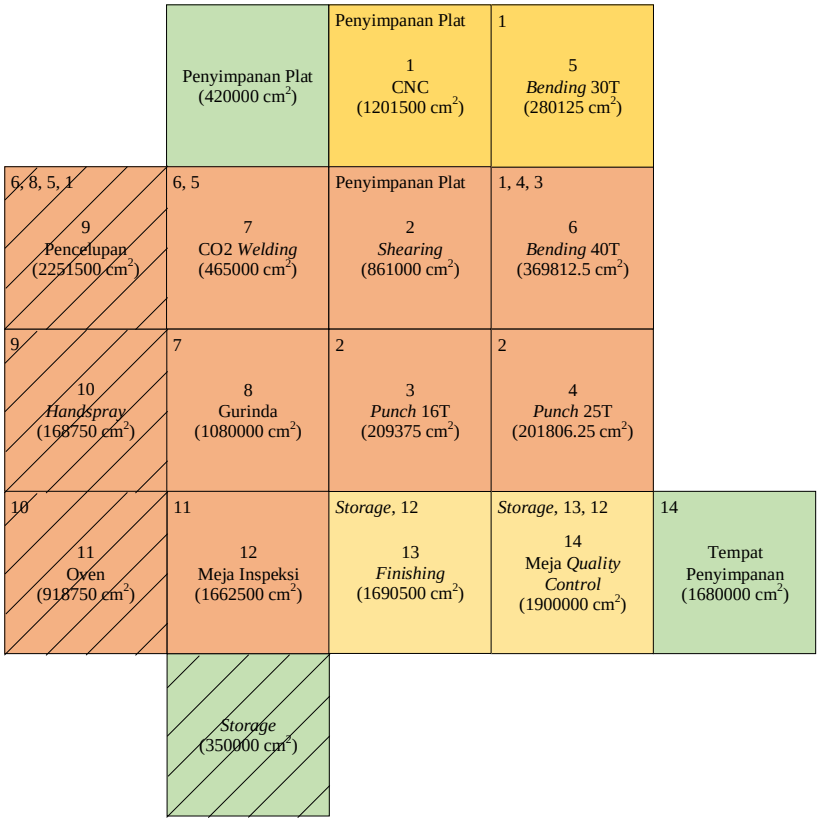


Gambar N.2
ARD *Non* Duplikasi Antar Sel *Outflow*

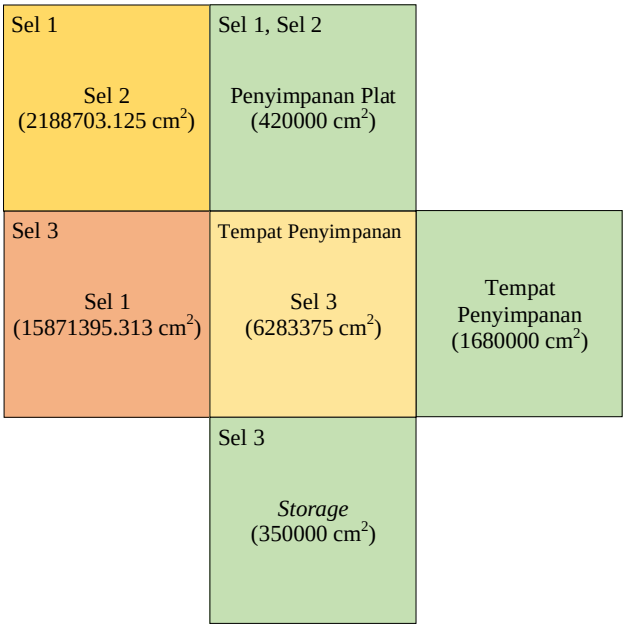
Gambar N.3
ARD *Non* Dupliaksi *Outflow*



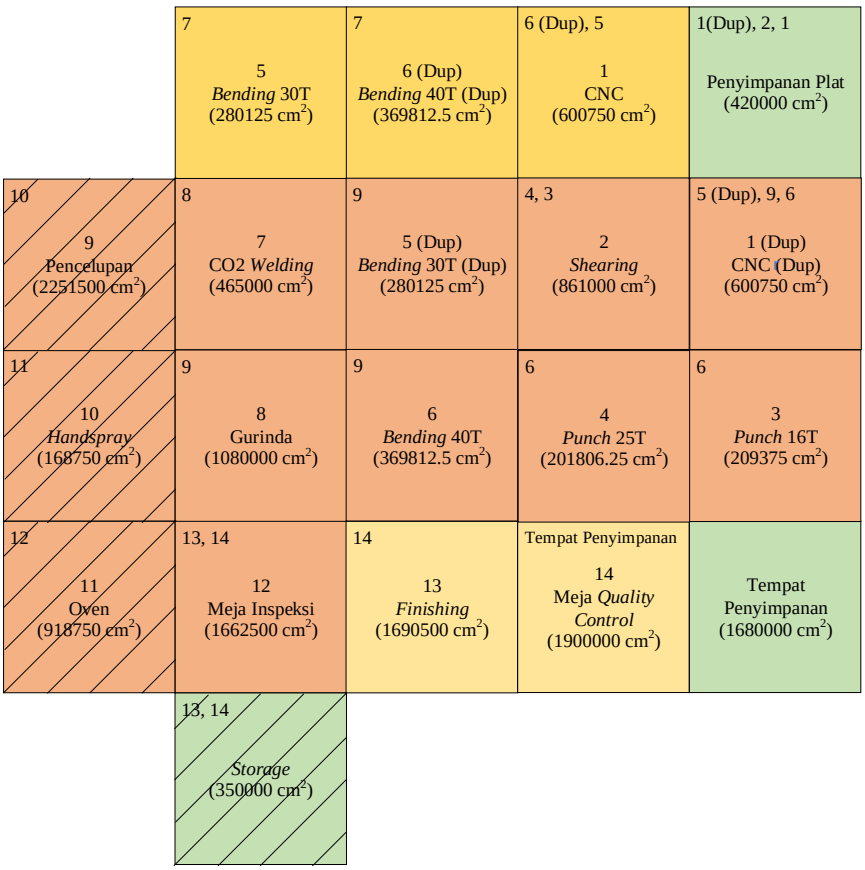
Gambar N.4
ARD *Non* Duplikasi Antar Sel *Inflow*



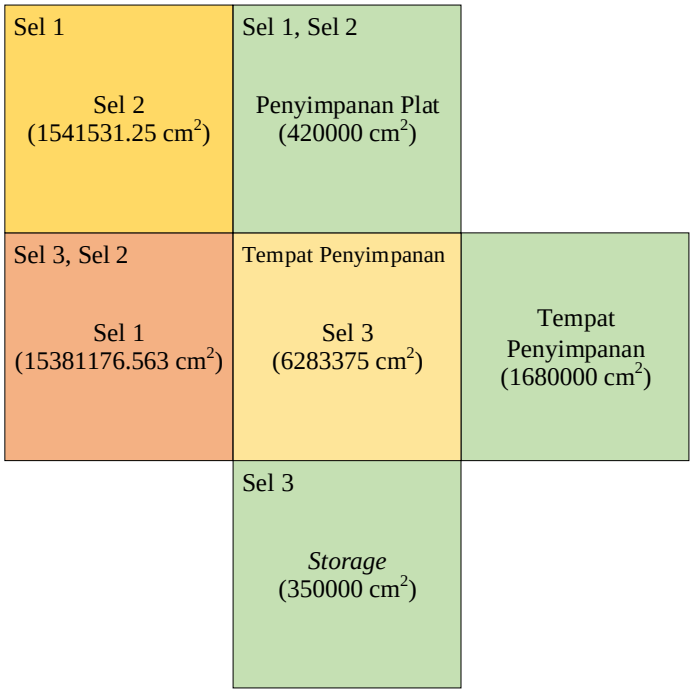
Gambar N.5
ARD *Non* Duplikasi *Inflow*



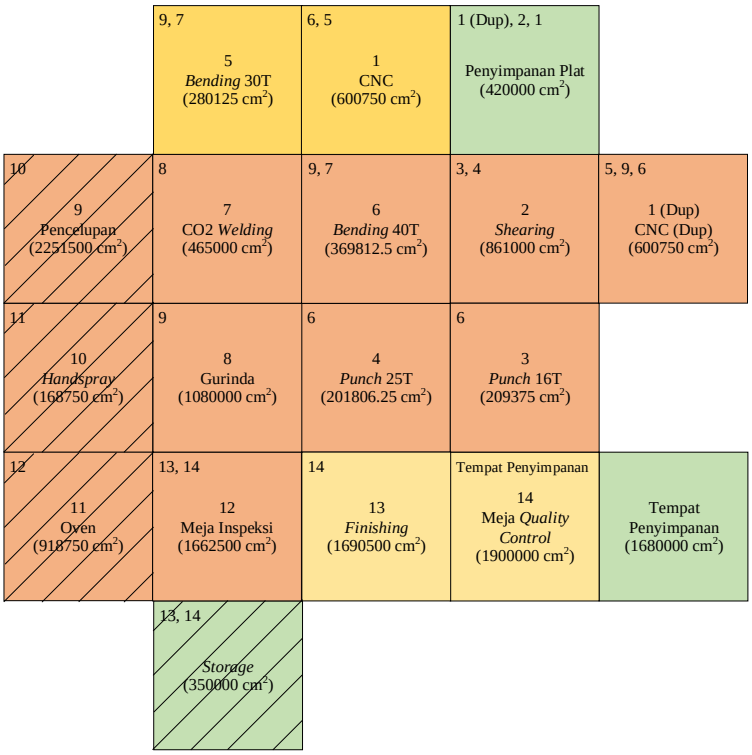
Gambar N.6
ARD Duplikasi Antar Sel *Outflow*



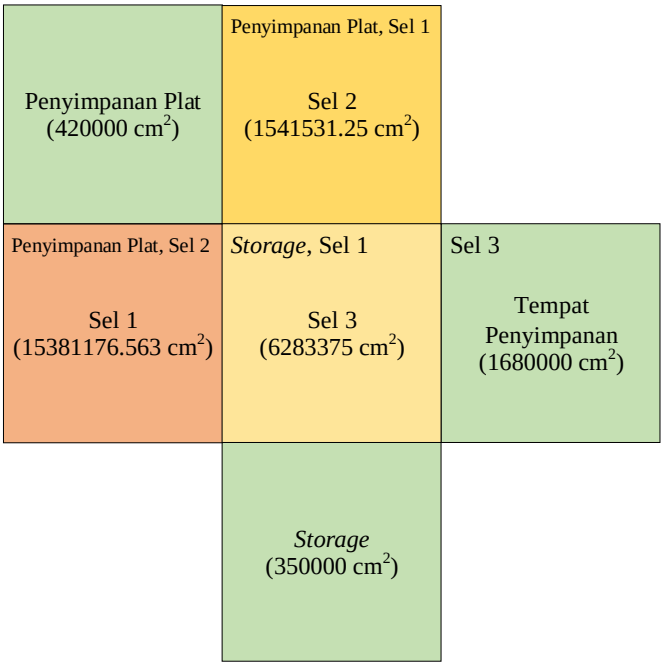
Gambar N.7
ARD Duplikasi *Outflow*



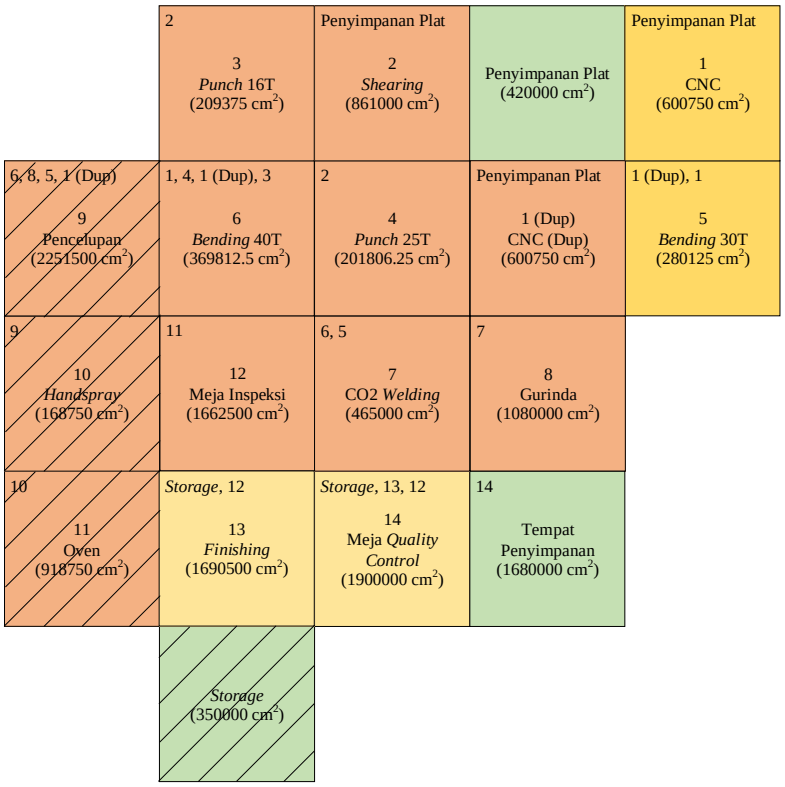
Gambar N.8
ARD Antar Sel Optimasi *Outflow*



Gambar N.8
ARD Optimasi *Outflow*



Gambar N.9
ARD Antar Sel Optimasi *Inflow*



Gambar N.10
ARD Optimasi *Inflow*

LAMPIRAN O

PENALTI

PERBAIKAN

Tabel O.1
Penalti *By Process Inflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		0
Penyimpanan Plat																		0
CNC																		0
Shearing																		0
Punch 16T																		0
Punch 25T				-1														-1
Bending 30T																		0
Bending 40T																		0
CO2 *Welding*																		0
Gurinda																		0
Pencelupan			-1				-1	-2										-4
Handspray																		0
Oven																		0
Meja Inspeksi																		0
Finishing	-1																	-1
Meja *Quality Control*	-2																	-2
Tempat Penyimpanan																		0
Total																		-8

Tabel O.2
Penalti *Non* Duplikasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage															-1	-1		-2
Penyimpanan Plat																		0
CNC											-1							-1
Shearing																		0
Punch 16T								-1										-1
Punch 25T																		0
Bending 30T											-1							-1
Bending 40T											-2							-2
CO2 *Welding*																		0
Gurinda											-1							-1
Pencelupan																		0
Handspray																		0
Oven																		0
Meja Inspeksi														-1				-1
Finishing																		0
Meja *Quality Control*																		0
Tempat Penyimpanan																		0
Total																		-9

Tabel O.3
Penalti *Non* Duplikasi *Inflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		0
Penyimpanan Plat																		0
CNC																		0
Shearing		-1																-1
Punch 16T																		0
Punch 25T				-1														-1
Bending 30T																		0
Bending 40T			-1															-1
CO2 *Welding*							-1	-2										-3
Gurinda																		0
Pencelupan			-1				-1	-2										-4
Handspray																		0
Oven																		0
Meja Inspeksi																		0
Finishing	-1																	-1
Meja *Quality Control*	-2													-1				-3
Tempat Penyimpanan																		0
Total																		-14

Tabel O.4
Penalti *Non* Duplikasi Antar Sel *Outflow*

Penalti *Non Duplikasi Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel O.5
Penalti *Non* Duplikasi Antar Sel *Inflow*

Penalti *Non Duplikasi Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel O.6
Penalti Duplikasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																		-1	-1		-2
Penyimpanan Plat																					0
CNC																					0
CNC (Dup)									-2	-1				-1							-4
Shearing																					0
Punch 16T										-2											-2
Punch 25T																					0
Bending 30T																					0
Bending 30T (Dup)														-2							-2
Bending 40T														-2							-2
Bending 40T (Dup)												-1									-1
CO2 *Welding*																					0
Gurinda														-1							-1
Pencelupan																					0
Handspray																					0
Oven																					0
Meja Inspeksi																			-1		-1
Finishing																					0
Meja *Quality Control*																					0
Tempat Penyimpanan																					0
Total																					-15

Tabel O.7
Penalti Duplikasi *Outflow* Antar Sel

Penalti *Duplikasi Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat			-1				-1
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							-1

Tabel O.8
Penalti Duplikasi *Inflow* Antar Sel

Penalti *Duplikasi Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

Tabel O.9
Penalti Optimasi *Outflow*

From \ *To*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																-1	-1		-2
Penyimpanan Plat				-1															-1
CNC																			0
CNC (Dup)								-2	-1			-1							-4
Shearing																			0
Punch 16T									-1										-1
Punch 25T																			0
Bending 30T												-1							-1
Bending 40T												-2							-2
CO2 *Welding*																			0
Gurinda												-1							-1
Pencelupan																			0
Handspray																			0
Oven																			0
Meja Inspeksi																	-1		-1
Finishing																			0
Meja *Quality Control*																			0
Tempat Penyimpanan																			0
Total																			-13

Tabel O.10
Penalti Optimasi *Inflow*

To / *From*	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Total
Storage																			0
Penyimpanan Plat																			0
CNC																			0
CNC (Dup)																			0
Shearing																			0
Punch 16T																			0
Punch 25T																			0
Bending 30T																			0
Bending 40T			-2	-1															-3
CO2 *Welding*								-1	-1										-2
Gurinda																			0
Pencelupan				-1				-1			-1								-3
Handspray																			0
Oven																			0
Meja Inspeksi														-1					-1
Finishing																			0
Meja *Quality Control*	-1																		-1
Tempat Penyimpanan																			0
Total																			-10

Tabel O.11
Penalti Optimasi *Outflow* Antar Sel

Penalti *Duplikasi Outflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat			-1				-1
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							-1

Tabel O.12
Penalti Optimasi *Inflow* Antar Sel

Penalti *Duplikasi Inflow* Antar Sel							
To / *From*	*Storage*	Penyimpanan Plat	Sel 1	Sel 2	Sel 3	Tempat Penyimpanan	Total
Storage							0
Penyimpanan Plat							0
Sel 1							0
Sel 2							0
Sel 3							0
Tempat Penyimpanan							0
Total							0

LAMPIRAN P

TABEL

LINTASAN

PERBAIKAN

Tabel P.1
Lintasan *By Process Inflow*

Tabel Lintasan *By Process Inflow*																					
Dari	Ke	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
			350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
			591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
			295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
CNC	Penyimpanan Plat	1		324.037	548.065															872.102	872.102
Shearing	Penyimpanan Plat	1		324.037		463.950														787.987	787.987
Punch 16T	*Shearing*	1				463.950	228.788													692.738	692.738
Punch 25T	*Shearing*	1				463.950	457.575	224.614												1146.140	1146.140
		2				463.950		224.614		608.122										1296.687	
Bending 30T	CNC	1			548.065				264.634											812.699	812.699
Bending 40T	CNC	1			548.065					304.061										852.126	852.126
	Punch 25T	1						224.614		304.061										528.675	528.675
	Punch 16T	1					228.788	449.229		304.061										982.077	982.077
		2				927.901	228.788			304.061										1460.749	
CO2 *Welding*	*Bending* 40T	1								304.061	340.955									645.016	645.016
	Bending 30T	1							264.634		340.955									605.589	605.589
Gurinda	CO2 *Welding*	1									340.955	519.615								860.570	860.570
Pencelupan	*Bending* 40T	1								304.061	681.909	1039.230	750.250							2775.451	2775.451
	Gurinda	1										519.615	750.250							1269.865	1269.865
	Bending 30T	1							264.634		681.909	1039.230	750.250							2736.024	2736.024
	CNC	1			548.065				529.268		681.909	1039.230	750.250							3548.723	3548.723
		2			548.065					608.122	681.909	1039.230	750.250							3627.576	
Handspray	Pencelupan	1											750.250	205.396						955.646	955.646
Oven	*Handspray*	1												205.396	479.257					684.653	684.653
Meja Inspeksi	Oven	1													479.257	644.690				1123.947	1123.947
Finishing	*Storage*	1	295.804													1289.380	650.096			2235.280	2235.280
	Meja Inspeksi	1														644.690	650.096			1294.786	1294.786
Meja *Quality Control*	*Storage*	1	295.804													1289.380		689.202	1296.148	3570.534	3570.534
		2	295.804													1289.380	1300.192	689.202		3574.578	
	Finishing	1															650.096	689.202		1339.299	1339.299
	Meja Inspeksi	1														644.690	1300.192	689.202		2634.085	2630.040
		2														644.690		689.202	1296.148	2630.040	
Tempat Penyimpanan	Meja *Quality Control*	1																689.202	648.074	1337.277	1337.277

Tabel P.2
Lintasan *Non* Duplikasi *Outflow*

Tabel Lintasan *Non Duplikasi Outflow*																							
Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804													1289.380	650.096			2235.280	2235.280
		Meja *Quality Control*		1	295.804													1289.380	1300.192	689.202		3574.578	3574.578
-	Penyimpanan Plat	CNC	2	1		324.037	548.065															872.102	872.102
		Shearing	1	1			548.065	463.950														1012.015	1012.015
2	CNC	*Bending* 40T	1	1			548.065					304.061										852.126	852.126
		Bending 30T	2	1			548.065				264.634											812.699	812.699
		Pencelupan	1	1			548.065				529.268		681.909		750.250							2509.492	2509.492
				2			548.065					608.122	681.909		750.250							2588.346	
1	*Shearing*	*Punch* 16T	1	1				463.950	228.788													692.738	692.738
		Punch 25T		1				463.950		224.614		608.122										1296.687	1146.140
				2				463.950	457.575	224.614												1146.140	
1	*Punch* 16T	*Bending* 40T	1	1				927.901	228.788			304.061										1460.749	982.077
				2					228.788	449.229		304.061										982.077	
1	*Punch* 25T	*Bending* 40T	1	1						224.614		304.061										528.675	528.675
2	*Bending* 30T	Pencelupan	1	1							264.634		681.909		750.250							1696.793	1696.793
		CO2 *Welding*		1							264.634		340.955									605.589	605.589
1	*Bending* 40T	Pencelupan	1	1								304.061	681.909		750.250							1736.220	1736.220
		CO2 *Welding*		1								304.061	340.955									645.016	645.016
	CO2 *Welding*	Gurinda		1									340.955	519.615								860.570	860.570
1	Gurinda	Pencelupan	1	1									681.909	519.615	750.250							1951.774	1951.774
1	Pencelupan	*Handspray*	1	1											750.250	205.396						955.646	955.646
1	*Handspray*	Oven	1	1												205.396	479.257					684.653	684.653
1	Oven	Meja Inspeksi	1	1													479.257	644.690				1123.947	1123.947
1	Meja Inspeksi	*Finishing*	3	1														644.690	650.096			1294.786	1294.786
		Meja *Quality Control*		1														644.690	1300.192	689.202		2634.085	2634.085
3	*Finishing*	Meja *Quality Control*	3	1															650.096	689.202		1339.299	1339.299
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																689.202	648.074	1337.277	1337.277

Tabel P.2
Lintasan *Non* Duplikasi *Outflow*

Tabel Lintasan *Non Duplikasi Inflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	1201500	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	1096.130	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	548.065	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
2	CNC	Penyimpanan Plat	-	1		324.037	548.065															872.1018	872.1018
1	*Shearing*	Penyimpanan Plat	-	1		324.037	1096.130	463.950														1884.117	1469.897
				2		324.037		463.950					681.909									1469.897	
1	*Punch* 16T	*Shearing*	1	1				463.950	228.788													692.738	692.738
1	*Punch* 25T	*Shearing*	1	1				463.950	457.575	224.614												1146.14	1146.14
				2				463.950		224.614		608.122										1296.687	
2	*Bending* 30T	CNC	2	1			548.065				264.634											812.699	812.699
1	*Bending* 40T	CNC	2	1			548.065	927.901				304.061										1780.027	1381.394
				2			548.065				529.268	304.061										1381.394	
		Punch 25T	1	1						224.614		304.061										528.6753	528.6753
		Punch 16T		1				927.901	228.788			304.061										1460.749	982.0771
				2					228.788	449.229		304.061										982.0771	
1	CO2 *Welding*	*Bending* 40T	1	1				927.901				304.061	340.955									1572.916	1572.916
		Bending 30T	2	1			1096.130	927.901			264.634		340.955									2629.619	2141.612
				2				927.901			264.634	608.122	340.955									2141.612	
1	Gurinda	CO2 *Welding*	1	1									340.955	519.615								860.5698	860.5698
1	Pencelupan	*Bending* 40T	1	1				927.901				304.061	681.909		750.250							2664.121	2664.121
		Gurinda		1									681.909	519.615	750.250							1951.774	1951.774
		Bending 30T	2	1			1096.130	927.901			264.634		681.909		750.250							3720.824	3232.816
				2				927.901			264.634	608.122	681.909		750.250							3232.816	
		CNC	1	1			548.065	927.901					681.909		750.250							2908.125	2908.125
1	*Handspray*	Pencelupan	1	1											750.250	205.396						955.6459	955.6459
1	Oven	*Handspray*	1	1												205.396	479.257					684.6532	684.6532
1	Meja Inspeksi	Oven	1	1													479.257	644.690				1123.947	1123.947
3	*Finishing*	*Storage*	-	1	295.804													1289.380	650.096			2235.28	2235.28
		Meja Inspeksi	1	1														644.690	650.096			1294.786	1294.786
3	Meja *Quality Control*	*Storage*	-	1	295.804													1289.380	1300.192	689.202		3574.578	3574.578
		Finishing	3	1															650.096	689.202		1339.299	1339.299
		Meja Inspeksi	1	1														644.690	1300.192	689.202		2634.085	2634.085
-	Tempat Penyimpanan	Meja *Quality Control*	3	1																689.202	648.074	1337.277	1337.277

Tabel P.4
Lintasan Duplikasi *Outflow*

Tabel Lintasan *Duplikasi Outflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 30T (Dup)	*Bending* 40T	*Bending* 40T (Dup)	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	280125	369812.5	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	529.268	608.122	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	264.634	304.061	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804																1289.380	650.096			2235.280	2235.280
		Meja *Quality Control*		1	295.804																1289.380	1300.192	689.202		3574.578	3574.578
-	Penyimpanan Plat	CNC (Dup)	1	1		324.037		387.540																	711.577	711.577
		Shearing		1		324.037	775.081		463.950																1563.068	1563.068
				2		324.037		775.081	463.950																1563.068	
		CNC	2	1		324.037	387.540																		711.577	711.577
2	CNC	*Bending* 40T (Dup)	1	1			387.540								304.061										691.601	691.601
		Bending 30T	2	1			387.540					264.634			608.122										1260.297	1260.297
1	CNC (Dup)	*Bending* 30T (Dup)	1	1				387.540	927.901				264.634												1580.075	1580.075
		Pencelupan		1				387.540	927.901				529.268			681.909		750.250							3276.869	3276.869
		Bending 40T		1				387.540	927.901				529.268	304.061											2148.771	1598.405
				2				387.540	927.901		449.229			304.061											2068.731	
				3				387.540		457.575	449.229			304.061											1598.405	
1	*Shearing*	*Punch* 25T	1	1					463.950		224.614														688.565	688.565
		Punch 16T		1					463.950	228.788	449.229														1141.966	1141.966
				2				775.081	463.950	228.788															1467.819	
1	*Punch* 16T	*Bending* 40T	1	1						228.788	449.229			304.061											982.077	982.077
2	*Punch* 25T	*Bending* 40T	1	1							224.614			304.061											528.675	528.675
2	*Bending* 30T	CO2 *Welding*	1	1								264.634				340.955									605.589	605.589
1	*Bending* 30T (Dup)	Pencelupan	1	1									264.634			681.909		750.250							1696.793	1696.793
1	*Bending* 40T	Pencelupan	1	1										304.061		681.909	1039.230	750.250							2775.451	2265.488
				2									529.268	304.061		681.909		750.250							2265.488	
2	*Bending* 40T (Dup)	CO2 *Welding*	1	1								529.268			304.061	340.955									1174.284	1174.284
				2									529.268		304.061	340.955									1174.284	
1	CO2 *Welding*	Gurinda	1	1												340.955	519.615								860.570	860.570
1	Gurinda	Pencelupan	1	1												681.909	519.615	750.250							1951.774	1951.774
1	Pencelupan	*Handspray*	1	1														750.250	205.396						955.646	955.646
1	*Handspray*	Oven	1	1															205.396	479.257					684.653	684.653
1	Oven	Meja Inspeksi	1	1																479.257	644.690				1123.947	1123.947
1	Meja Inspeksi	*Finishing*	3	1																	644.690	650.096			1294.786	1294.786
		Meja *Quality Control*		1																	644.690	1300.192	689.202		2634.085	2634.085
3	*Finishing*	Meja *Quality Control*	3	1																		650.096	689.202		1339.299	1339.299
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																			689.202	648.074	1337.277	1337.277

Tabel P.5
Lintasan Optimasi *Outflow*

Tabel Lintasan *Optimasi Outflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
-	*Storage*	*Finishing*	3	1	295.804														1289.380	650.096			2235.28	2235.28
		Meja *Quality Control*		1	295.804														1289.380	1300.192	689.202		3574.578	3574.578
-	Penyimpanan Plat	CNC (Dup)	1	1		324.037		387.540	927.901														1639.478	1639.478
		Shearing		1		324.037			463.950														787.9875	787.9875
		CNC	2	1		324.037	387.540																711.5774	711.5774
2	CNC	*Bending* 40T	1	1			387.540						304.061										691.6014	691.6014
		Bending 30T	2	1			387.540					264.634											652.1745	652.1745
1	CNC (Dup)	*Bending* 30T	2	1				387.540	927.901			264.634	608.122	681.909									2870.107	2870.107
				2			775.081	387.540	927.901			264.634	608.122										2963.278	
		Pencelupan	1	1				387.540	927.901				608.122	681.909		750.250							3355.722	3355.722
		Bending 40T	1	1				387.540	927.901				304.061										1619.502	1619.502
1	*Shearing*	*Punch* 16T	1	1					463.950	228.788													692.738	692.738
		Punch 25T		1					463.950	457.575	224.614												1146.14	1146.14
				2					463.950		224.614		608.122										1296.687	
1	*Punch* 16T	*Bending* 40T	1	1					927.901	228.788			304.061										1460.749	982.0771
				2						228.788	449.229		304.061										982.0771	
1	*Punch* 25T	*Bending* 40T	1	1							224.614		304.061										528.6753	528.6753
2	*Bending* 30T	Pencelupan	1	1								264.634		681.909		750.250							1696.793	1696.793
		CO2 *Welding*		1								264.634		340.955									605.5887	605.5887
1	*Bending* 40T	Pencelupan	1	1									304.061	681.909		750.250							1736.22	1736.22
		CO2 *Welding*		1									304.061	340.955									645.0156	645.0156
1	CO2 *Welding*	Gurinda	1	1										340.955	519.615								860.5698	860.5698
1	Gurinda	Pencelupan	1	1										681.909	519.615	750.250							1951.774	1951.774
1	Pencelupan	*Handspray*	1	1												750.250	205.396						955.6459	955.6459
1	*Handspray*	Oven	1	1													205.396	479.257					684.6532	684.6532
1	Oven	Meja Inspeksi	1	1														479.257	644.690				1123.947	1123.947
1	Meja Inspeksi	*Finishing*	3	1															644.690	650.096			1294.786	1294.786
		Meja *Quality Control*		1															644.690	1300.192	689.202		2634.085	2634.085
3	*Finishing*	Meja *Quality Control*	3	1																650.096	689.202		1339.299	1339.299
3	Meja *Quality Control*	Tempat Penyimpanan	-	1																	689.202	648.074	1337.277	1337.277

Tabel P.6
Lintasan Optimasi *Inflow*

Tabel Lintasan *Optimasi Inflow*

Sel	Dari	Ke	Sel	Lintasan	*Storage*	Penyimpanan Plat	CNC	CNC (Dup)	*Shearing*	*Punch* 16T	*Punch* 25T	*Bending* 30T	*Bending* 40T	CO2 *Welding*	Gurinda	Pencelupan	*Handspray*	Oven	Meja Inspeksi	*Finishing*	Meja *Quality Control*	Tempat Penyimpanan	Jumlah Jarak	Jumlah Terpilih
					350000	420000	600750	600750	861000	209375	201806.25	280125	369812.5	465000	1080000	2251500	168750	918750	1662500	1690500	1900000	1680000		
					591.608	648.074	775.081	775.081	927.901	457.575	449.229	529.268	608.122	681.909	1039.230	1500.500	410.792	958.514	1289.380	1300.192	1378.405	1296.148		
					295.804	324.037	387.540	387.540	463.950	228.788	224.614	264.634	304.061	340.955	519.615	750.250	205.396	479.257	644.690	650.096	689.202	648.074		
2	CNC	Penyimpanan Plat	-	1		324.037	387.540																711.5774	711.5774
1	CNC (Dup)	Penyimpanan Plat	-	1		324.037		387.540															711.5774	711.5774
1	*Shearing*	Penyimpanan Plat	-	1		324.037			463.950														787.9875	787.9875
1	*Punch* 16T	*Shearing*	1	1					463.950	228.788													692.738	692.738
1	*Punch* 25T	*Shearing*	1	1					463.950		224.614												688.5647	688.5647
2	*Bending* 30T	CNC (Dup)	1	1				387.540				264.634											652.1745	652.1745
		CNC	2	1			387.540					264.634											652.1745	652.1745
1	*Bending* 40T	CNC	2	1			387.540	775.081			449.229	529.268	304.061										2445.179	2445.179
		Punch 25T	1	1							224.614		304.061										528.6753	528.6753
		CNC (Dup)		1				387.540			449.229		304.061										1140.83	1140.83
		Punch 16T		1						228.788			304.061										532.8486	532.8486
1	CO2 *Welding*	*Bending* 40T	1	1							449.229		304.061	340.955									1094.244	1094.244
				2									304.061	340.955					1289.380				1934.395	
		Bending 30T	2	1				775.081			449.229	264.634		340.955									1829.898	1829.898
				2				775.081				264.634		340.955	1039.230								2419.9	
1	Gurinda	CO2 *Welding*	1	1										340.955	519.615								860.5698	860.5698
1	Pencelupan	*Bending* 40T	1	1									304.061			750.250							1054.311	1054.311
		Gurinda		1				775.081			449.229		608.122		519.615	750.250							3102.296	3009.125
				2									608.122	681.909	519.615	750.250			1289.380				3849.276	
				3							449.229		608.122	681.909	519.615	750.250							3009.125	
		Bending 30T	2	3				775.081			449.229	264.634	608.122			750.250							2847.315	2847.315
		CNC (Dup)	1	1				387.540			449.229		608.122			750.250							2195.141	2195.141
1	*Handspray*	Pencelupan	1	1												750.250	205.396						955.6459	955.6459
1	Oven	*Handspray*	1	1													205.396	479.257					684.6532	684.6532
1	Meja Inspeksi	Oven	1	1														479.257	644.690	1300.192			2424.139	2424.139
1	*Finishing*	*Storage*	-	1	295.804															650.096			945.9001	945.9001
		Meja Inspeksi	1	1															644.690	650.096			1294.786	1294.786
3	Meja *Quality Control*	*Storage*	-	1	295.804															1300.192	689.202		2285.199	2285.199
		Finishing	3	1																650.096	689.202		1339.299	1339.299
		Meja Inspeksi	1	1										681.909					644.690		689.202		2015.801	2015.801
				2															644.690	1300.192	689.202		2634.085	
-	Tempat Penyimpanan	Meja *Quality Control*	3	1																	689.202	648.074	1337.277	1337.277

LAMPIRAN Q

OMH PROSES PERBAIKAN, NON DUPLIKASI PERBAIKAN, DUPLIKASI PERBAIKAN DAN OPTIMASI PERBAIKAN

Tabel Q.1
OMH *Process Inflow*

No	Aliran		Komponen	Frekuensi	Luas		d	c	AMH	OMH	OMH Antar
	Dari	Ke		/Tahun	Dari	Ke					Depatermen
1	*Bending* 30T	CO2 *Welding*	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945
2	*Bending* 30T	CO2 *Welding*	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	
3	*Bending* 30T	Pencelupan	*Joint* Dudukan *Afdeck*	235	280125	2251500	2736.024	Rp 0.50	*Handtrolley*	Rp 320,650	Rp 1,282,602
4	*Bending* 30T	Pencelupan	Kait Gembok *Body*	235	280125	2251500	2736.024	Rp 0.50	*Handtrolley*	Rp 320,650	
5	*Bending* 30T	Pencelupan	Dudukan 260 - 2mm	235	280125	2251500	2736.024	Rp 0.50	*Handtrolley*	Rp 320,650	
6	*Bending* 30T	Pencelupan	SP Pintu	235	280125	2251500	2736.024	Rp 0.50	*Handtrolley*	Rp 320,650	
7	*Bending* 40T	CO2 *Welding*	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965	Rp 680,338
8	*Bending* 40T	CO2 *Welding*	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593	
9	*Bending* 40T	CO2 *Welding*	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779	
10	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	Rp 2,927,440
11	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
12	*Bending* 40T	Pencelupan	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
13	*Bending* 40T	Pencelupan	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
14	*Bending* 40T	Pencelupan	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
15	*Bending* 40T	Pencelupan	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
16	*Bending* 40T	Pencelupan	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 325,271	
17	*Bending* 40T	Pencelupan	*Mounting Plate*	470	369812.5	2251500	2775.451	Rp 0.50	*Handtrolley*	Rp 650,542	
18	CNC	*Bending* 30T	*Joint* Dudukan *Afdeck*	1175	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 476,224	Rp 1,047,694
19	CNC	*Bending* 30T	Kait Gembok *Body*	235	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
20	CNC	*Bending* 30T	Dudukan 260 - 2mm	235	1201500	2251500	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
21	CNC	*Bending* 30T	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
22	CNC	*Bending* 30T	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	
23	CNC	*Bending* 30T	SP Pintu	470	1201500	369812.5	812.699	Rp 0.50	*Handtrolley*	Rp 190,490	
24	CNC	*Bending* 40T	*Body*	235	1201500	280125	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	Rp 599,193
25	CNC	*Bending* 40T	*Body* Atas Bawah	705	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 299,597	
26	CNC	*Bending* 40T	*Mounting Plate*	235	1201500	280125	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	
27	CNC	*Bending* 40T	Pintu	235	1201500	280125	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	
28	CNC	Pencelupan	*Green Plat*	235	1201500	280125	3548.723	Rp 0.50	*Handtrolley*	Rp 415,895	Rp 415,895
29	CO2 *Welding*	Gurinda	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240
30	CO2 *Welding*	Gurinda	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264	
31	*Finishing*	Meja *Quality Control*	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549
32	Gurinda	Pencelupan	*Sub Assembly* 1	1880	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 1,190,583	Rp 1,339,405
33	Gurinda	Pencelupan	*Sub Assembly* 2	235	1080000	2251500	1269.865	Rp 0.50	*Handtrolley*	Rp 148,823	
34	*Handspray*	*Oven*	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246	Rp 314,649
35	*Handspray*	*Oven*	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649	
36	*Handspray*	*Oven*	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
37	*Handspray*	*Oven*	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664	
38	*Handspray*	*Oven*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
39	*Handspray*	*Oven*	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
40	*Handspray*	*Oven*	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
41	*Handspray*	*Oven*	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
42	*Handspray*	*Oven*	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
43	*Handspray*	*Oven*	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
44	*Handspray*	*Oven*	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
45	*Handspray*	*Oven*	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
46	*Handspray*	*Oven*	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
47	*Handspray*	*Oven*	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	
48	*Handspray*	*Oven*	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318	
49	Meja Inspeksi	*Finishing*	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152	Rp 4,248,816
50	Meja Inspeksi	*Finishing*	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
51	Meja Inspeksi	*Finishing*	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
52	Meja Inspeksi	*Finishing*	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
53	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
54	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
55	Meja Inspeksi	*Finishing*	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
56	Meja Inspeksi	*Finishing*	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
57	Meja Inspeksi	*Finishing*	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
58	Meja Inspeksi	*Finishing*	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
59	Meja Inspeksi	*Finishing*	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
60	Meja Inspeksi	*Finishing*	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487	
61	Meja Inspeksi	*Finishing*	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	
62	Meja Inspeksi	Meja *Quality Control*	*Sub Assembly* 2	470	1662500	1900000	2630.040	Rp 0.50	*Handtrolley*	Rp 616,459	Rp 924,689
63	Meja Inspeksi	Meja *Quality Control*	SP Pintu	235	1662500	1900000	2630.040	Rp 0.50	*Handtrolley*	Rp 308,230	
64	Meja *Quality Control*	Tempat Penyimpanan	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914
65	*Oven*	Meja Inspeksi	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609	Rp 2,634,437
66	*Oven*	Meja Inspeksi	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
67	*Oven*	Meja Inspeksi	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
68	*Oven*	Meja Inspeksi	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
69	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
70	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
71	*Oven*	Meja Inspeksi	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
72	*Oven*	Meja Inspeksi	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
73	*Oven*	Meja Inspeksi	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
74	*Oven*	Meja Inspeksi	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
75	*Oven*	Meja Inspeksi	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
76	*Oven*	Meja Inspeksi	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444	
77	*Oven*	Meja Inspeksi	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
78	*Oven*	Meja Inspeksi	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	
79	*Oven*	Meja Inspeksi	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	

Tabel Q.1
OMH *Process Inflow* (Lanjutan)

80	Pencelupan	*Handspray*	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	109,217	
81	Pencelupan	*Handspray*	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	21,843	
82	Pencelupan	*Handspray*	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	3,718	
83	Pencelupan	*Handspray*	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	3,718	
84	Pencelupan	*Handspray*	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
85	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
86	Pencelupan	*Handspray*	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
87	Pencelupan	*Handspray*	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	Rp 439,190
88	Pencelupan	*Handspray*	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
89	Pencelupan	*Handspray*	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
90	Pencelupan	*Handspray*	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
91	Pencelupan	*Handspray*	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
92	Pencelupan	*Handspray*	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	18,590	
93	Pencelupan	*Handspray*	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	29,279	
94	Pencelupan	*Handspray*	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp	18,590	
95	Penyimpanan Plat	CNC	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
96	Penyimpanan Plat	CNC	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
97	Penyimpanan Plat	CNC	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
98	Penyimpanan Plat	CNC	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
99	Penyimpanan Plat	CNC	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
100	Penyimpanan Plat	CNC	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	Rp 10,895,043
101	Penyimpanan Plat	CNC	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
102	Penyimpanan Plat	CNC	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
103	Penyimpanan Plat	CNC	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
104	Penyimpanan Plat	CNC	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
105	Penyimpanan Plat	CNC	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp	990,458	
106	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
107	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
108	Penyimpanan Plat	*Shearing*	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
109	Penyimpanan Plat	*Shearing*	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	Rp 6,264,500
110	Penyimpanan Plat	*Shearing*	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
111	Penyimpanan Plat	*Shearing*	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
112	Penyimpanan Plat	*Shearing*	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp	894,929	
113	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp	115,095	
114	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp	115,095	Rp 345,286
115	*Punch* 16T	*Bending* 40T	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp	115,095	
116	*Punch* 25T	*Bending* 40T	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp	61,959	
117	*Punch* 25T	*Bending* 40T	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp	61,959	Rp 247,834
118	*Punch* 25T	*Bending* 40T	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp	61,959	
119	*Punch* 25T	*Bending* 40T	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp	61,959	
120	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp	81,186	
121	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp	81,186	Rp 243,558
122	*Shearing*	*Punch* 16T	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp	81,186	
123	*Shearing*	*Punch* 25T	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp	134,323	
124	*Shearing*	*Punch* 25T	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp	134,323	Rp 537,291
125	*Shearing*	*Punch* 25T	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp	134,323	
126	*Shearing*	*Punch* 25T	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp	134,323	
127	*Storage*	*Finishing*	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp	2,299,145	
128	*Storage*	*Finishing*	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp	766,382	
129	*Storage*	*Finishing*	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp	574,786	
130	*Storage*	*Finishing*	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp	383,191	
131	*Storage*	*Finishing*	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp	574,786	Rp 8,047,007
132	*Storage*	*Finishing*	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp	957,977	
133	*Storage*	*Finishing*	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp	957,977	
134	*Storage*	*Finishing*	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp	383,191	
135	*Storage*	*Finishing*	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp	574,786	
136	*Storage*	*Finishing*	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp	574,786	
137	*Storage*	Meja *Quality Control*	*Handle Push* Jadul	1410	350000	1900000	3570.534	Rp 0.36	Operator	Rp	1,836,275	
138	*Storage*	Meja *Quality Control*	Engsel Hitam Kecil	1410	350000	1900000	3570.534	Rp 0.36	Operator	Rp	1,836,275	
139	*Storage*	Meja *Quality Control*	Baut M6x15 Multifungsi	235	350000	1900000	3570.534	Rp 0.36	Operator	Rp	306,046	
140	*Storage*	Meja *Quality Control*	Baut M6x10 Multifungsi	235	350000	1900000	3570.534	Rp 0.36	Operator	Rp	306,046	Rp 6,733,007
141	*Storage*	Meja *Quality Control*	Mur M6	470	350000	1900000	3570.534	Rp 0.36	Operator	Rp	612,092	
142	*Storage*	Meja *Quality Control*	Ring *Plat* M6	705	350000	1900000	3570.534	Rp 0.36	Operator	Rp	918,137	
143	*Storage*	Meja *Quality Control*	Ring Per M6	705	350000	1900000	3570.534	Rp 0.36	Operator	Rp	918,137	
Total OMH *By Process Inflow*										Rp	56,874,523	Rp 56,874,523

Tabel Q.2
OMH *Non* Duplikasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
2	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
3	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
4	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360	Rp 8,045,521	Rp 8,045,521
5	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
6	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
7	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	1012.015	Rp 0.81	*Handlift*	Rp 1,149,360		
8	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
9	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
10	-	Penyimpanan Plat	CNC	2	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
11	-	Penyimpanan Plat	CNC	2	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
12	-	Penyimpanan Plat	CNC	2	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
13	-	Penyimpanan Plat	CNC	2	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043	Rp 10,895,043
14	-	Penyimpanan Plat	CNC	2	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
15	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
16	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
17	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
18	-	Penyimpanan Plat	CNC	2	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
37	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
40	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291	
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
44	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965		
51	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593	Rp 680,338	
52	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779		
53	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
56	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478	Rp 1,831,299	
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		Rp 11,085,779
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
60	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 406,955		
61	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
62	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
63	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 1,829,917	Rp 2,058,657	
64	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 228,740		
65	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
66	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
67	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
68	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
69	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
70	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	
73	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
78	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel Q.2
OMH *Non* Duplikasi *Outflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 11,085,779
95	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
96	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
97	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
98	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
103	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
107	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
109	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	2	CNC	*Bending* 40T	1	*Body*	1175	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 499,328		
111	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	Rp 1,098,521	
112	2	CNC	*Bending* 40T	1	*Mounting Plate*	470	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 199,731		
113	2	CNC	*Bending* 40T	1	Pintu	705	1201500	369812.5	852.126	Rp 0.50	*Handtrolley*	Rp 299,597		
114	2	CNC	Pencelupan	1	*Green Plat*	235	1201500	2251500	852.126	Rp 0.50	*Handtrolley*	Rp 99,866	Rp 99,866	
115	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945	Rp 2,135,759
116	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972		
117	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
118	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857	Rp 795,428	
119	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
120	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
121	2	CNC	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
122	2	CNC	*Bending* 30T	2	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
123	2	CNC	*Bending* 30T	2	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 571,469	Rp 571,469
124	2	CNC	*Bending* 30T	2	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
125	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
126	2	CNC	*Bending* 30T	2	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Non Duplikasi Outflow*												Rp 57,507,602	Rp 57,507,602	Rp 57,507,602

Tabel Q.3
OMH *Non* Duplikasi *Inflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
2	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
3	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
4	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383	Rp 11,685,678	Rp 11,685,678
5	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
6	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
7	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	1469.897	Rp 0.81	*Handlift*	Rp 1,669,383		
8	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
9	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
10	-	Penyimpanan Plat	CNC	2	*Green Plat*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
11	-	Penyimpanan Plat	CNC	2	*Joint* Dudukan *Afdeck*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
12	-	Penyimpanan Plat	CNC	2	Kait Gembok *Body*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
13	-	Penyimpanan Plat	CNC	2	*Mounting Plate*	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458	Rp 10,895,043	Rp 10,895,043
14	-	Penyimpanan Plat	CNC	2	Dudukan 260 - 2mm	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
15	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
16	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
17	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
18	-	Penyimpanan Plat	CNC	2	SP Pintu	1410	420000	1201500	872.102	Rp 0.81	*Handlift*	Rp 990,458		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
37	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
40	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 537,291	
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
44	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1572.916	Rp 0.50	*Handtrolley*	Rp 921,696		
51	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1572.916	Rp 0.50	*Handtrolley*	Rp 184,339	Rp 1,659,052	
52	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1572.916	Rp 0.50	*Handtrolley*	Rp 553,017		
53	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		
56	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224	Rp 2,810,013	
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		Rp 13,043,208
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 312,224		
60	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	2664.121	Rp 0.50	*Handtrolley*	Rp 624,447		
61	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
62	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
63	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 1,829,917	Rp 2,058,657	
64	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 228,740		
65	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
66	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
67	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
68	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
69	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
70	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	
73	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
78	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel Q.3
OMH *Non* Duplikasi *Inflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp13,043,208
95	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
96	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
97	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
98	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
103	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
107	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
109	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	2	CNC	*Bending* 40T	1	*Body*	1175	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 809,468		
111	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 161,894	Rp 1,780,829	
112	2	CNC	*Bending* 40T	1	*Mounting Plate*	470	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 323,787		
113	2	CNC	*Bending* 40T	1	Pintu	705	1201500	369812.5	1381.394	Rp 0.50	*Handtrolley*	Rp 485,681		
114	2	CNC	Pencelupan	1	*Green Plat*	235	1201500	2251500	2908.125	Rp 0.50	*Handtrolley*	Rp 340,820	Rp 340,820	
115	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	2141.612	Rp 0.50	*Handtrolley*	Rp 250,988	Rp 501,976	Rp 4,139,114
116	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	2141.612	Rp 0.50	*Handtrolley*	Rp 250,988		
117	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	3232.816	Rp 0.50	*Handtrolley*	Rp 378,872		
118	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	3232.816	Rp 0.50	*Handtrolley*	Rp 378,872	Rp 1,515,489	
119	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	3232.816	Rp 0.50	*Handtrolley*	Rp 378,872		
120	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	3232.816	Rp 0.50	*Handtrolley*	Rp 378,872		
121	2	CNC	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
122	2	CNC	*Bending* 30T	2	Kait Gembok *Body*	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
123	2	CNC	*Bending* 30T	2	Dudukan 260 - 2mm	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245	Rp 571,469	Rp 571,469
124	2	CNC	*Bending* 30T	2	Poket	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
125	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
126	2	CNC	*Bending* 30T	2	SP Pintu	235	1201500	280125	812.699	Rp 0.50	*Handtrolley*	Rp 95,245		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Non Duplikasi Inflow*												Rp65,108,543	Rp65,108,543	Rp65,108,543

Tabel Q.4
OMH Duplikasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,848,891	Rp 17,275,283
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199	Rp 12,426,391	
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	1563.068	Rp 0.81	*Handlift*	Rp 1,775,199		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145	Rp 8,047,007	Rp 14,787,641
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355	Rp 6,740,634	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	CNC (Dup)	Bending 30T (Dup)	1	Joint Dudukan Afdeck	235	600750	280125	1580.075	Rp 0.50	*Handtrolley*	Rp 185,178	Rp 740,713	Rp 13,201,961
37	1	CNC (Dup)	Bending 30T (Dup)	1	Kait Gembok Body	235	600750	280125	1580.075	Rp 0.50	*Handtrolley*	Rp 185,178		
38	1	CNC (Dup)	Bending 30T (Dup)	1	Dudukan 260 - 2mm	235	600750	280125	1580.075	Rp 0.50	*Handtrolley*	Rp 185,178		
39	1	CNC (Dup)	Bending 30T (Dup)	1	SP Pintu	235	600750	280125	1580.075	Rp 0.50	*Handtrolley*	Rp 185,178		
40	1	CNC (Dup)	Bending 40T	1	*Mounting Plate*	470	600750	369812.5	1598.405	Rp 0.50	*Handtrolley*	Rp 374,653	Rp 374,653	
41	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
42	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
43	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
44	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
45	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
46	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
47	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
48	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
49	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
50	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
51	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
52	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
53	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
54	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
55	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
56	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
57	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
58	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
59	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
60	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
61	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
62	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
63	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
64	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
65	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609	Rp 2,634,437	
66	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
67	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
68	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
69	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
70	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
71	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
72	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
73	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
74	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
75	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
76	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
77	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
78	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
79	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		

Tabel Q.4
OMH Duplikasi *Outflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
80	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
81	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
82	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
83	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
84	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
85	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
88	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
90	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
93	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	Bending 30T (Dup)	Pencelupan	1	Joint Dudukan Afdeck	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
96	1	Bending 30T (Dup)	Pencelupan	1	Kait Gembok Body	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857	Rp 795,428	
97	1	Bending 30T (Dup)	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
98	1	Bending 30T (Dup)	Pencelupan	1	SP Pintu	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		Rp 13,201,961
99	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
100	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
101	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
102	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506	Rp 2,389,551	
103	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
104	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
105	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 265,506		
106	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	2265.488	Rp 0.50	*Handtrolley*	Rp 531,011		
107	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	3276.869	Rp 0.50	*Handtrolley*	Rp 384,035	Rp 384,035	
108	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 1,829,917	Rp 2,058,657	
109	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 228,740		
110	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
111	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834	Rp 401,501	
112	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	1141.966	Rp 0.50	*Handtrolley*	Rp 133,834		
113	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
114	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787	
115	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
116	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
117	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945	
118	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972		
119	2	*Bending* 40T (Dup)	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 688,106		Rp 1,380,535
120	2	*Bending* 40T (Dup)	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 137,621	Rp 1,238,590	
121	2	*Bending* 40T (Dup)	CO2 *Welding*	1	Pintu	705	369812.5	465000	1174.284	Rp 0.50	*Handtrolley*	Rp 412,863		
122	2	CNC	*Bending* 40T (Dup)	2	*Body*	1175	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 405,264		
123	2	CNC	*Bending* 40T (Dup)	2	*Body* Atas Bawah	235	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 81,053	Rp 729,475	
124	2	CNC	*Bending* 40T (Dup)	2	Pintu	705	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 243,158		Rp 1,024,878
125	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701	Rp 295,403	
126	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	1260.297	Rp 0.50	*Handtrolley*	Rp 147,701		
127	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
128	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
130	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
131	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
132	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
133	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
134	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
135	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
136	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
137	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
138	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
139	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
140	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
141	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Duplikasi Outflow*												Rp 61,697,430	Rp 61,697,430	Rp 61,697,430

Tabel Q.5
OMH Optimasi *Outflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979		
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979	Rp 11,171,873	
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	1639.478	Rp 0.81	*Handlift*	Rp 1,861,979		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		Rp 17,436,373
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	2235.280	Rp 0.36	Operator	Rp 2,299,145		
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	2235.280	Rp 0.36	Operator	Rp 766,382		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786	Rp 8,047,007	
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	2235.280	Rp 0.36	Operator	Rp 957,977		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	2235.280	Rp 0.36	Operator	Rp 383,191		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		Rp 14,787,641
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	2235.280	Rp 0.36	Operator	Rp 574,786		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	3574.578	Rp 0.36	Operator	Rp 1,838,355		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	3574.578	Rp 0.36	Operator	Rp 306,392	Rp 6,740,634	
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	3574.578	Rp 0.36	Operator	Rp 612,785		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	3574.578	Rp 0.36	Operator	Rp 919,177		
36	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	470	600750	369812.5	1619.502	Rp 0.50	*Handtrolley*	Rp 379,598	Rp 379,598	
37	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	3355.722	Rp 0.50	*Handtrolley*	Rp 393,276	Rp 393,276	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
39	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
40	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323	Rp 780,849	
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
43	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
44	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	1146.140	Rp 0.50	*Handtrolley*	Rp 134,323		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
46	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095	Rp 345,286	
47	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	982.077	Rp 0.50	*Handtrolley*	Rp 115,095		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
50	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
51	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
52	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 377,965		
53	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 75,593	Rp 680,338	
62	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	645.016	Rp 0.50	*Handtrolley*	Rp 226,779		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
56	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478	Rp 1,831,299	Rp 11,858,653
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
60	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 203,478		
61	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1736.220	Rp 0.50	*Handtrolley*	Rp 406,955		
63	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
64	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
65	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 1,829,917	Rp 2,058,657	
66	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	1951.774	Rp 0.50	*Handtrolley*	Rp 228,740		
67	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217		
68	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
69	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
70	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279	Rp 439,190	
75	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
78	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
80	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
81	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel Q.5
OMH Optimasi *Outflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
82	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
83	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
84	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
85	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
90	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
93	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
96	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 11,858,653
97	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 658,609		
98	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
99	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
100	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
102	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
103	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722	Rp 2,634,437	
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
106	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
107	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
108	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 263,444		
109	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
110	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
111	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	1123.947	Rp 0.50	*Handtrolley*	Rp 131,722		
112	1	CNC (Dup)	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	600750	280125	2870.107	Rp 0.50	*Handtrolley*	Rp 336,364		
113	1	CNC (Dup)	*Bending* 30T	2	Kait Gembok *Body*	235	600750	280125	2870.107	Rp 0.50	*Handtrolley*	Rp 336,364	Rp 1,345,457	Rp 1,345,457
114	1	CNC (Dup)	*Bending* 30T	2	Dudukan 260 - 2mm	235	600750	280125	2870.107	Rp 0.50	*Handtrolley*	Rp 336,364		
115	1	CNC (Dup)	*Bending* 30T	2	SP Pintu	235	600750	280125	2870.107	Rp 0.50	*Handtrolley*	Rp 336,364		
116	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
117	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
118	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
119	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
120	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
121	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
122	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
123	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 5,174,927
124	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
125	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
126	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
127	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
128	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 617,407	Rp 926,111	
130	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2634.085	Rp 0.50	*Handtrolley*	Rp 308,704		
131	2	CNC	*Bending* 40T	1	*Body*	1175	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 405,264		
132	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 81,053	Rp 729,475	
133	2	CNC	*Bending* 40T	1	Pintu	705	600750	369812.5	691.601	Rp 0.50	*Handtrolley*	Rp 243,158		
134	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972	Rp 141,945	
135	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	605.589	Rp 0.50	*Handtrolley*	Rp 70,972		Rp 1,666,848
136	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
137	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857	Rp 795,428	
138	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
139	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	1696.793	Rp 0.50	*Handtrolley*	Rp 198,857		
140	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 152,864	Rp 152,864
141	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Optimasi Outflow*												Rp 61,274,969	Rp 61,274,969	Rp 61,274,969

Tabel Q.6
OMH Optimasi *Inflow*

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
1	-	Penyimpanan Plat	CNC	2	*Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,040,743	Rp 4,040,743
2	-	Penyimpanan Plat	CNC	2	*Body* Atas Bawah	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
3	-	Penyimpanan Plat	CNC	2	Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
4	-	Penyimpanan Plat	CNC	2	Poket	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
5	-	Penyimpanan Plat	CNC	2	Kait Gembok Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
6	-	Penyimpanan Plat	CNC (Dup)	1	*Green Plat*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149	Rp 4,848,891	Rp 11,113,392
7	-	Penyimpanan Plat	CNC (Dup)	1	*Joint* Dudukan *Afdeck*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
8	-	Penyimpanan Plat	CNC (Dup)	1	Kait Gembok *Body*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
9	-	Penyimpanan Plat	CNC (Dup)	1	*Mounting Plate*	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
10	-	Penyimpanan Plat	CNC (Dup)	1	Dudukan 260 - 2mm	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
11	-	Penyimpanan Plat	CNC (Dup)	1	SP Pintu	1410	420000	600750	711.577	Rp 0.81	*Handlift*	Rp 808,149		
12	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929	Rp 6,264,500	
13	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping A - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
14	-	Penyimpanan Plat	*Shearing*	1	Dudukan *Afdeck* Samping B - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
15	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
16	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* A2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
17	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C1 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
18	-	Penyimpanan Plat	*Shearing*	1	*Afdeck* C2 - 1.2mm	1410	420000	861000	787.987	Rp 0.81	*Handlift*	Rp 894,929		
19	-	*Storage*	*Finishing*	3	*Handle* 75	2820	350000	1690500	945.900	Rp 0.36	Operator	Rp 972,926	Rp 3,405,240	Rp 7,714,472
20	-	*Storage*	*Finishing*	3	Baut *Hex* M6x35	940	350000	1690500	945.900	Rp 0.36	Operator	Rp 324,309		
21	-	*Storage*	*Finishing*	3	Baut M6x30	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
22	-	*Storage*	*Finishing*	3	Baut JF M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
23	-	*Storage*	*Finishing*	3	Mur M6	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
24	-	*Storage*	*Finishing*	3	Ring *Plat* M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
25	-	*Storage*	*Finishing*	3	Ring Per M6	1175	350000	1690500	945.900	Rp 0.36	Operator	Rp 405,386		
26	-	*Storage*	*Finishing*	3	Baut M5x10	470	350000	1690500	945.900	Rp 0.36	Operator	Rp 162,154		
27	-	*Storage*	*Finishing*	3	Ring Plat M5	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
28	-	*Storage*	*Finishing*	3	Baut M6x10	705	350000	1690500	945.900	Rp 0.36	Operator	Rp 243,231		
29	-	*Storage*	Meja *Quality Control*	3	*Handle Push* Jadul	1410	350000	1900000	2285.199	Rp 0.36	Operator	Rp 1,175,245	Rp 4,309,232	
30	-	*Storage*	Meja *Quality Control*	3	Engsel Hitam Kecil	1410	350000	1900000	2285.199	Rp 0.36	Operator	Rp 1,175,245		
31	-	*Storage*	Meja *Quality Control*	3	Baut M6x15 Multifungsi	235	350000	1900000	2285.199	Rp 0.36	Operator	Rp 195,874		
32	-	*Storage*	Meja *Quality Control*	3	Baut M6x10 Multifungsi	235	350000	1900000	2285.199	Rp 0.36	Operator	Rp 195,874		
33	-	*Storage*	Meja *Quality Control*	3	Mur M6	470	350000	1900000	2285.199	Rp 0.36	Operator	Rp 391,748		
34	-	*Storage*	Meja *Quality Control*	3	Ring *Plat* M6	705	350000	1900000	2285.199	Rp 0.36	Operator	Rp 587,623		
35	-	*Storage*	Meja *Quality Control*	3	Ring Per M6	705	350000	1900000	2285.199	Rp 0.36	Operator	Rp 587,623		
36	1	CNC (Dup)	*Bending* 40T	1	*Mounting Plate*	470	600750	369812.5	1140.830	Rp 0.50	*Handtrolley*	Rp 267,401	Rp 267,401	Rp 15,155,366
37	1	CNC (Dup)	Pencelupan	1	*Green Plat*	235	600750	2251500	2195.141	Rp 0.50	*Handtrolley*	Rp 257,261	Rp 257,261	
38	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186	Rp 243,558	
39	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
40	1	*Shearing*	*Punch* 16T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	861000	209375	692.738	Rp 0.50	*Handtrolley*	Rp 81,186		
41	1	*Shearing*	*Punch* 25T	1	*Afdeck* A1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697	Rp 322,787	
42	1	*Shearing*	*Punch* 25T	1	*Afdeck* A2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
43	1	*Shearing*	*Punch* 25T	1	*Afdeck* C1 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
44	1	*Shearing*	*Punch* 25T	1	*Afdeck* C2 - 1.2mm	235	861000	201806.25	688.565	Rp 0.50	*Handtrolley*	Rp 80,697		
45	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448	Rp 187,343	
46	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping A - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
47	1	*Punch* 16T	*Bending* 40T	1	Dudukan *Afdeck* Samping B - 1.2mm	235	209375	369812.5	532.849	Rp 0.50	*Handtrolley*	Rp 62,448		
48	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959	Rp 247,834	
49	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* A2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
50	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C1 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
51	1	*Punch* 25T	*Bending* 40T	1	*Afdeck* C2 - 1.2mm	235	201806.25	369812.5	528.675	Rp 0.50	*Handtrolley*	Rp 61,959		
52	1	*Bending* 40T	CO2 *Welding*	1	*Body*	1175	369812.5	465000	1094.244	Rp 0.50	*Handtrolley*	Rp 641,204	Rp 1,154,167	
53	1	*Bending* 40T	CO2 *Welding*	1	*Body* Atas Bawah	235	369812.5	465000	1094.244	Rp 0.50	*Handtrolley*	Rp 128,241		
62	1	*Bending* 40T	CO2 *Welding*	1	Pintu	705	369812.5	465000	1094.244	Rp 0.50	*Handtrolley*	Rp 384,722		
54	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561	Rp 1,112,047	
55	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping A - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
56	1	*Bending* 40T	Pencelupan	1	Dudukan *Afdeck* Samping B - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
57	1	*Bending* 40T	Pencelupan	1	*Afdeck* A1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
58	1	*Bending* 40T	Pencelupan	1	*Afdeck* A2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
59	1	*Bending* 40T	Pencelupan	1	*Afdeck* C1 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
60	1	*Bending* 40T	Pencelupan	1	*Afdeck* C2 - 1.2mm	235	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 123,561		
61	1	*Bending* 40T	Pencelupan	1	*Mounting Plate*	470	369812.5	2251500	1054.311	Rp 0.50	*Handtrolley*	Rp 247,122		
63	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 1	3525	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 1,546,977	Rp 1,753,240	
64	1	CO2 *Welding*	Gurinda	1	*Sub Assembly* 2	470	465000	1080000	860.570	Rp 0.51	*Handpallet*	Rp 206,264		
65	1	Gurinda	Pencelupan	1	*Sub Assembly* 1	1880	1080000	2251500	3009.125	Rp 0.50	*Handtrolley*	Rp 2,821,254	Rp 3,173,910	
66	1	Gurinda	Pencelupan	1	*Sub Assembly* 2	235	1080000	2251500	3009.125	Rp 0.50	*Handtrolley*	Rp 352,657		
67	1	Pencelupan	*Handspray*	1	*Sub Assembly* 1	235	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 109,217	Rp 439,190	
68	1	Pencelupan	*Handspray*	1	*Green Plat*	47	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 21,843		
69	1	Pencelupan	*Handspray*	1	*Joint* Dudukan *Afdeck*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
70	1	Pencelupan	*Handspray*	1	Kait Gembok *Body*	8	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 3,718		
71	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
72	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
73	1	Pencelupan	*Handspray*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
74	1	Pencelupan	*Handspray*	1	*Afdeck* A1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
75	1	Pencelupan	*Handspray*	1	*Afdeck* A2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
76	1	Pencelupan	*Handspray*	1	*Afdeck* C1 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
77	1	Pencelupan	*Handspray*	1	*Afdeck* C2 - 1.2mm	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
78	1	Pencelupan	*Handspray*	1	*Mounting Plate*	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
79	1	Pencelupan	*Handspray*	1	Dudukan 260 - 2mm	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		
80	1	Pencelupan	*Handspray*	1	*Sub Assembly* 2	63	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 29,279		
81	1	Pencelupan	*Handspray*	1	SP Pintu	40	2251500	168750	955.646	Rp 0.49	*Hanger*	Rp 18,590		

Tabel Q.6
OMH Optimasi *Inflow* (Lanjutan)

No	Sel	Aliran		Sel	Komponen	Frekuensi /Tahun	Luas		d	c	AMH	OMH	OMH Antar Depatermen	OMH Antar Sel
		Dari	Ke				Dari	Ke						
82	1	*Handspray*	*Oven*	1	*Sub Assembly* 1	235	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 78,246		
83	1	*Handspray*	*Oven*	1	*Green Plat*	47	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 15,649		
84	1	*Handspray*	*Oven*	1	*Joint* Dudukan *Afdeck*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
85	1	*Handspray*	*Oven*	1	Kait Gembok *Body*	8	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 2,664		
86	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Atas Bawah 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
87	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping A - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
88	1	*Handspray*	*Oven*	1	Dudukan *Afdeck* Samping B - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
89	1	*Handspray*	*Oven*	1	*Afdeck* A1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977	Rp 314,649	
90	1	*Handspray*	*Oven*	1	*Afdeck* A2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
91	1	*Handspray*	*Oven*	1	*Afdeck* C1 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
92	1	*Handspray*	*Oven*	1	*Afdeck* C2 - 1.2mm	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
93	1	*Handspray*	*Oven*	1	*Mounting Plate*	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
94	1	*Handspray*	*Oven*	1	Dudukan 260 - 2mm	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		
95	1	*Handspray*	*Oven*	1	*Sub Assembly* 2	63	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 20,977		
96	1	*Handspray*	*Oven*	1	SP Pintu	40	168750	918750	684.653	Rp 0.49	*Hanger*	Rp 13,318		Rp 15,155,366
97	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 1	1175	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 1,420,494		
98	1	*Oven*	Meja Inspeksi	1	*Green Plat*	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
99	1	*Oven*	Meja Inspeksi	1	*Joint* Dudukan *Afdeck*	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
100	1	*Oven*	Meja Inspeksi	1	Kait Gembok *Body*	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
101	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Atas Bawah 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
102	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping A - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
103	1	*Oven*	Meja Inspeksi	1	Dudukan *Afdeck* Samping B - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
104	1	*Oven*	Meja Inspeksi	1	*Afdeck* A1 - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099	Rp 5,681,977	
105	1	*Oven*	Meja Inspeksi	1	*Afdeck* A2 - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
106	1	*Oven*	Meja Inspeksi	1	*Afdeck* C1 - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
107	1	*Oven*	Meja Inspeksi	1	*Afdeck* C2 - 1.2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
108	1	*Oven*	Meja Inspeksi	1	*Mounting Plate*	470	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 568,198		
109	1	*Oven*	Meja Inspeksi	1	Dudukan 260 - 2mm	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
110	1	*Oven*	Meja Inspeksi	1	*Sub Assembly* 2	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
111	1	*Oven*	Meja Inspeksi	1	SP Pintu	235	918750	1662500	2424.139	Rp 0.50	*Handtrolley*	Rp 284,099		
112	1	CNC (Dup)	*Bending* 30T	2	*Joint* Dudukan *Afdeck*	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
113	1	CNC (Dup)	*Bending* 30T	2	Kait Gembok *Body*	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 305,728	Rp 305,728
114	1	CNC (Dup)	*Bending* 30T	2	Dudukan 260 - 2mm	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
115	1	CNC (Dup)	*Bending* 30T	2	SP Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
116	1	Meja Inspeksi	*Finishing*	3	*Sub Assembly* 1	3525	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 2,276,152		
117	1	Meja Inspeksi	*Finishing*	3	*Green Plat*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
118	1	Meja Inspeksi	*Finishing*	3	*Joint* Dudukan *Afdeck*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
119	1	Meja Inspeksi	*Finishing*	3	Kait Gembok *Body*	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
120	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Atas Bawah 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
121	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping A - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
122	1	Meja Inspeksi	*Finishing*	3	Dudukan *Afdeck* Samping B - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743	Rp 4,248,816	
123	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		Rp 4,957,546
124	1	Meja Inspeksi	*Finishing*	3	*Afdeck* A2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
125	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C1 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
126	1	Meja Inspeksi	*Finishing*	3	*Afdeck* C2 - 1.2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
127	1	Meja Inspeksi	*Finishing*	3	*Mounting Plate*	470	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 303,487		
128	1	Meja Inspeksi	*Finishing*	3	Dudukan 260 - 2mm	235	1662500	1690500	1294.786	Rp 0.50	*Handtrolley*	Rp 151,743		
129	1	Meja Inspeksi	Meja *Quality Control*	3	*Sub Assembly* 2	470	1662500	1900000	2015.801	Rp 0.50	*Handtrolley*	Rp 472,487	Rp 708,730	
130	1	Meja Inspeksi	Meja *Quality Control*	3	SP Pintu	235	1662500	1900000	2015.801	Rp 0.50	*Handtrolley*	Rp 236,243		
131	2	CNC	*Bending* 40T	1	*Body*	1175	600750	369812.5	2445.179	Rp 0.50	*Handtrolley*	Rp 1,432,823		
132	2	CNC	*Bending* 40T	1	*Body* Atas Bawah	235	600750	369812.5	2445.179	Rp 0.50	*Handtrolley*	Rp 286,565	Rp 2,579,082	
133	2	CNC	*Bending* 40T	1	Pintu	705	600750	369812.5	2445.179	Rp 0.50	*Handtrolley*	Rp 859,694		
134	2	*Bending* 30T	CO2 *Welding*	1	Poket	235	280125	465000	1829.898	Rp 0.50	*Handtrolley*	Rp 214,456	Rp 428,913	
135	2	*Bending* 30T	CO2 *Welding*	1	Kait Gembok Pintu	235	280125	465000	1829.898	Rp 0.50	*Handtrolley*	Rp 214,456		Rp 4,342,767
136	2	*Bending* 30T	Pencelupan	1	*Joint* Dudukan *Afdeck*	235	280125	2251500	2847.315	Rp 0.50	*Handtrolley*	Rp 333,693		
137	2	*Bending* 30T	Pencelupan	1	Kait Gembok *Body*	235	280125	2251500	2847.315	Rp 0.50	*Handtrolley*	Rp 333,693	Rp 1,334,773	
138	2	*Bending* 30T	Pencelupan	1	Dudukan 260 - 2mm	235	280125	2251500	2847.315	Rp 0.50	*Handtrolley*	Rp 333,693		
139	2	*Bending* 30T	Pencelupan	1	SP Pintu	235	280125	2251500	2847.315	Rp 0.50	*Handtrolley*	Rp 333,693		
140	2	CNC	*Bending* 30T	2	Poket	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432	Rp 152,864	Rp 152,864
141	2	CNC	*Bending* 30T	2	Kait Gembok Pintu	235	600750	280125	652.175	Rp 0.50	*Handtrolley*	Rp 76,432		
142	3	*Finishing*	Meja *Quality Control*	3	*Assembly* 1	3525	1690500	1900000	1339.299	Rp 0.51	*Handpallet*	Rp 2,407,549	Rp 2,407,549	Rp 2,407,549
143	3	Meja *Quality Control*	Tempat Penyimpanan	-	*Box Panel Wall Mounting*	3525	1900000	1680000	1337.277	Rp 0.51	*Handpallet*	Rp 2,403,914	Rp 2,403,914	Rp 2,403,914
Total OMH *Optimasi Inflow*												Rp 52,594,342	Rp 52,594,342	Rp 52,594,342