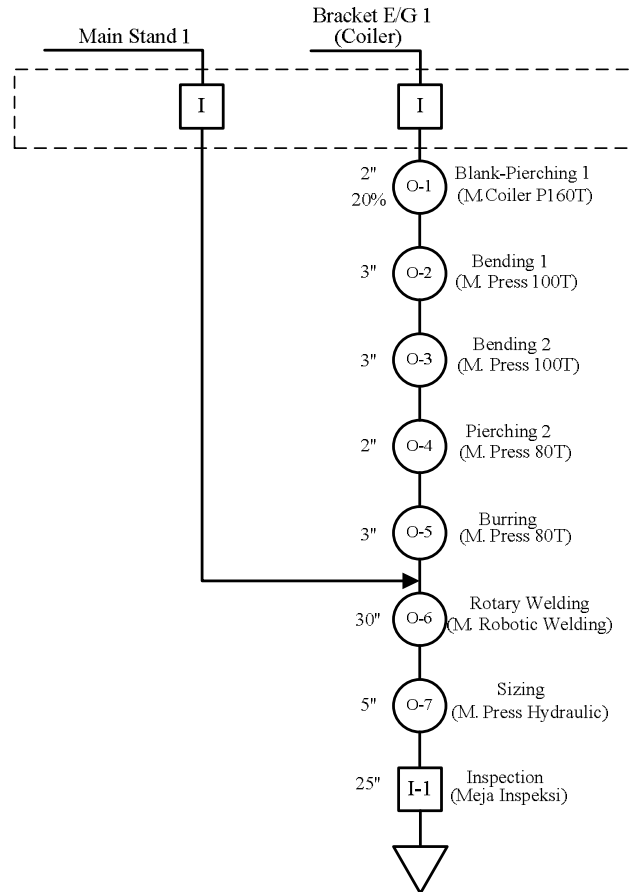


# LAMPIRAN A

PETA PROSES OPERASI

## PETA PROSES OPERASI

Nama Objek : Bracket E/G No 1 3SO  
 Nomor Peta : 1  
 Dipetakan oleh : Anton Sobandi  
 Tanggal Dipetakan : 28 Juli 2008

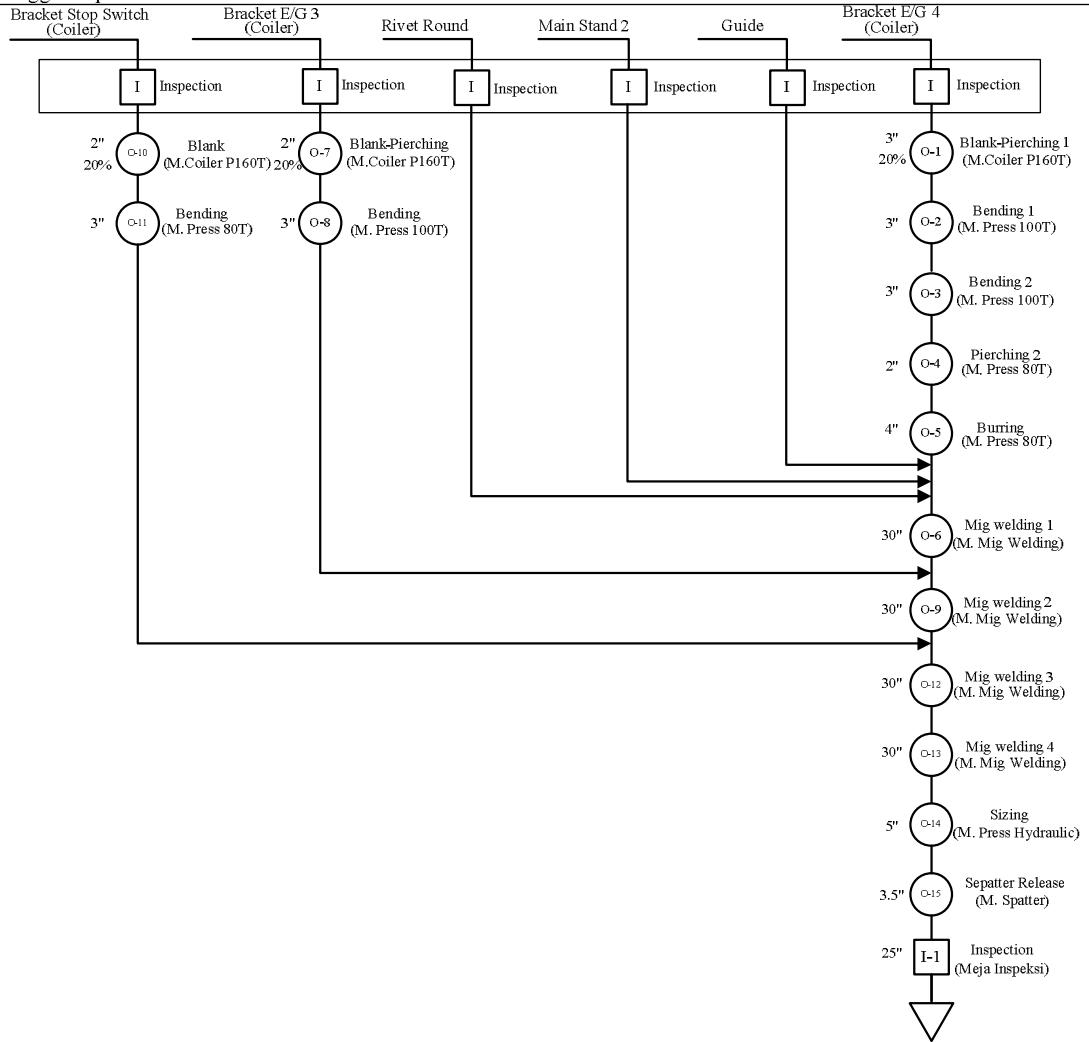


### RINGKASAN

	JUMLAH	WAKTU (DETIK)
○ OPERASI	7	48
□ PEMERIKSAAN	1	25
TOTAL	8	73

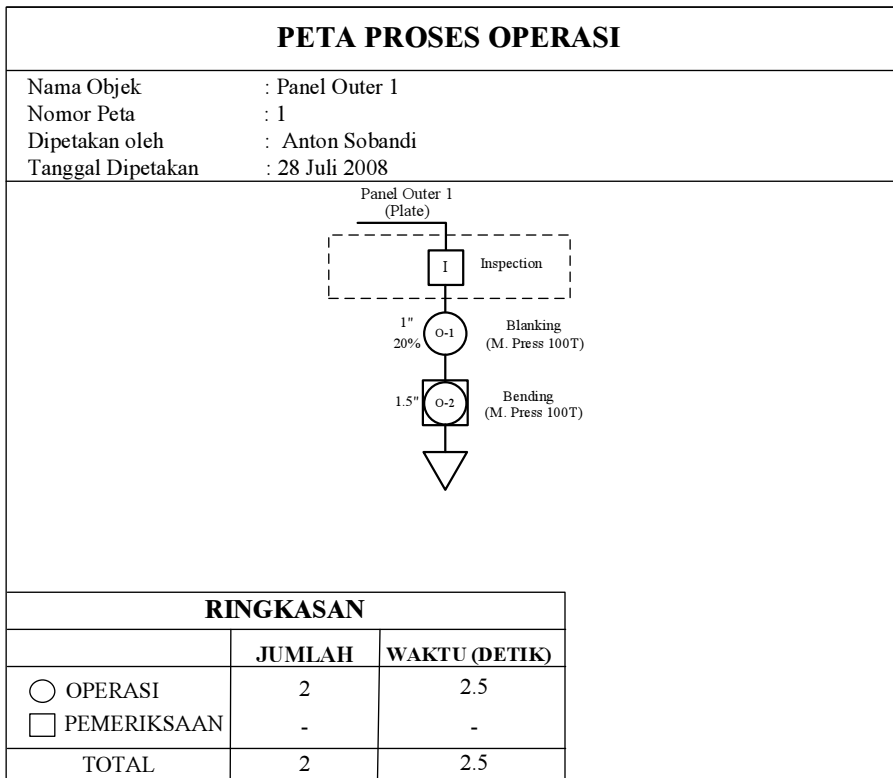
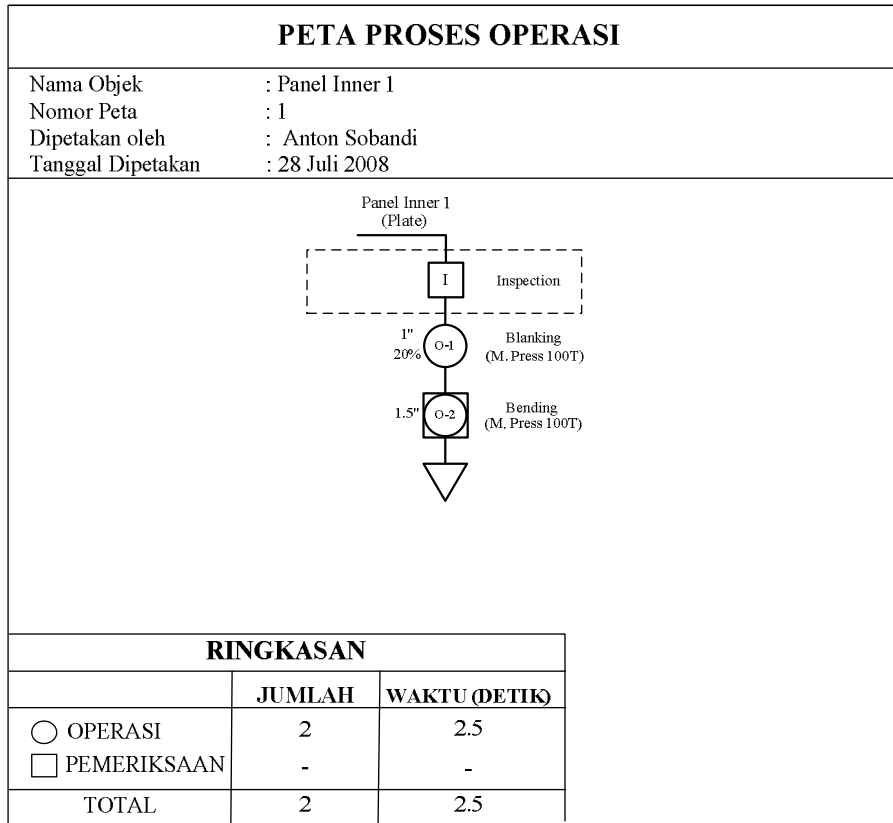
## PETA PROSES OPERASI

Nama Objek : Bracket E/G No 2 3SO  
 Nomor Peta : 1  
 Dipetakan oleh : Anton Sobandi  
 Tanggal Dipetakan : 28 Juli 2008



### RINGKASAN

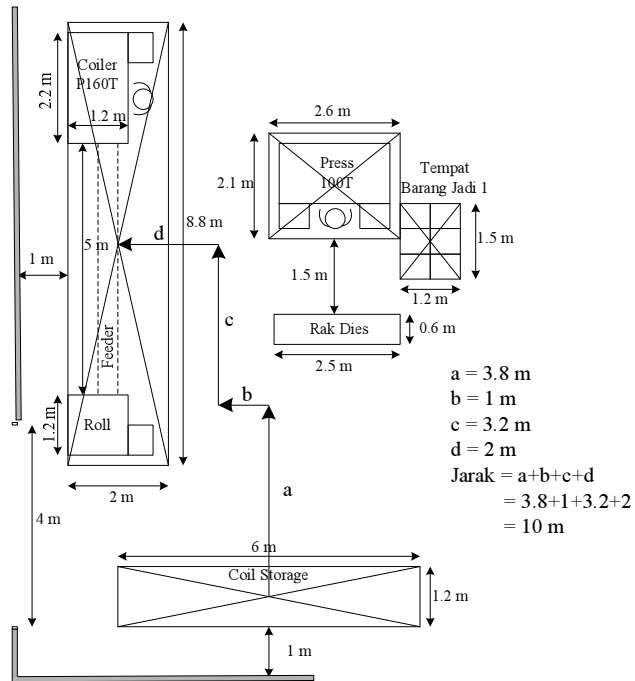
	JUMLAH	WAKTU (DETIK)
○ OPERASI	15	153.5
□ PEMERIKSAAN	1	25
TOTAL	16	178.5



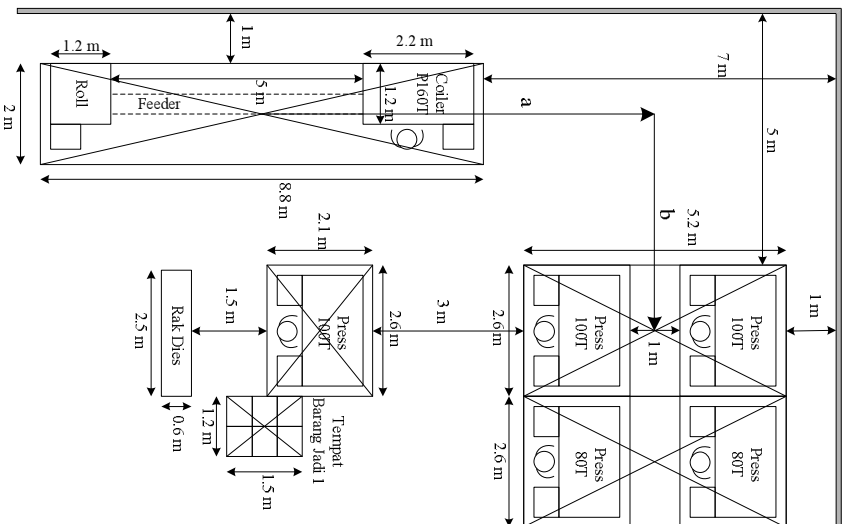
# LAMPIRAN B

JARAK TATA LETAK AWAL

1. Jarak dari Coil Storage ke Coiler P160T

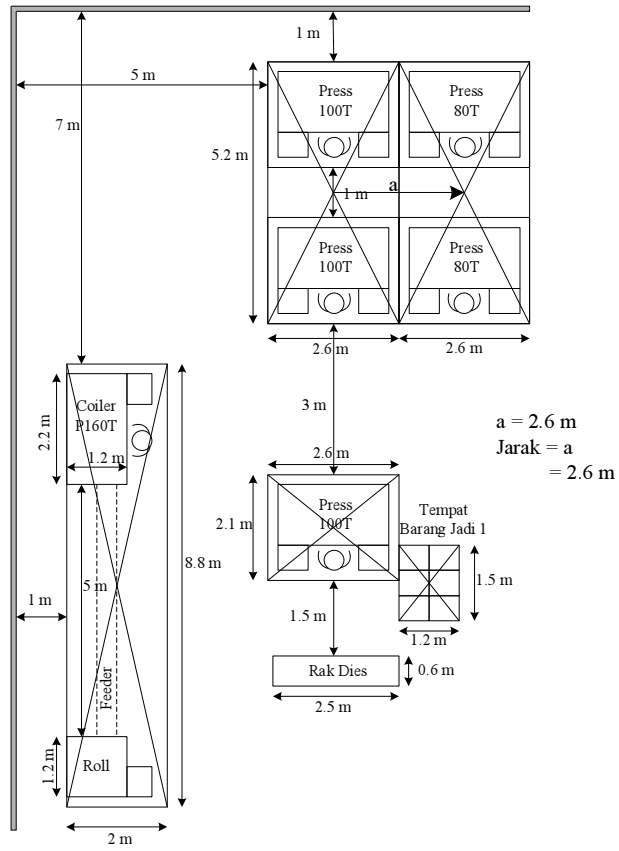


## 2. Jarak dari Coiler P160T ke P100T



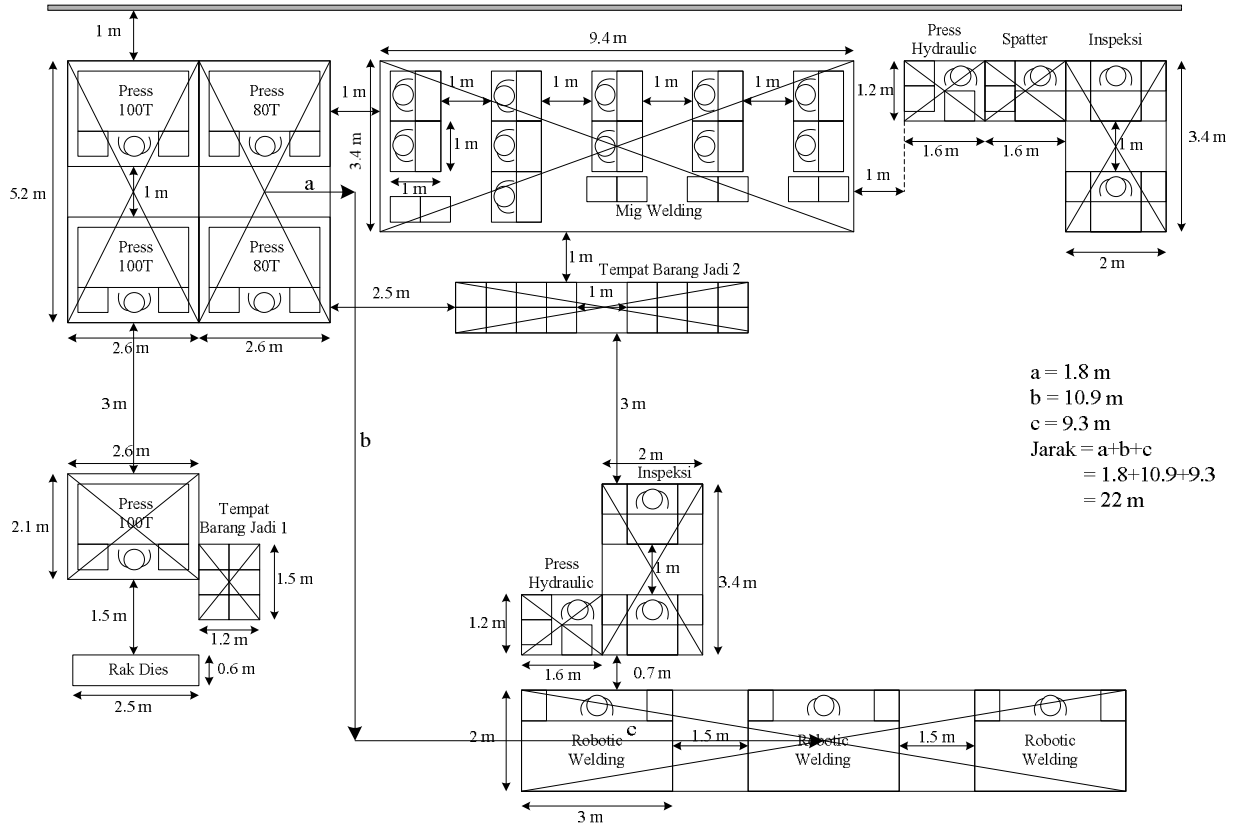
$$\begin{aligned}
 a &= 7.8 \text{ m} \\
 b &= 4.3 \text{ m} \\
 \text{Jarak} &= a+b \\
 &= 7.8+4.3 \\
 &= 12.1 \text{ m}
 \end{aligned}$$

### 3. Jarak dari P100T ke P80T

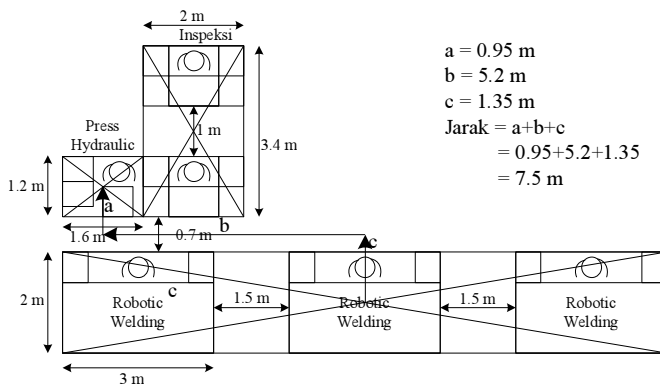




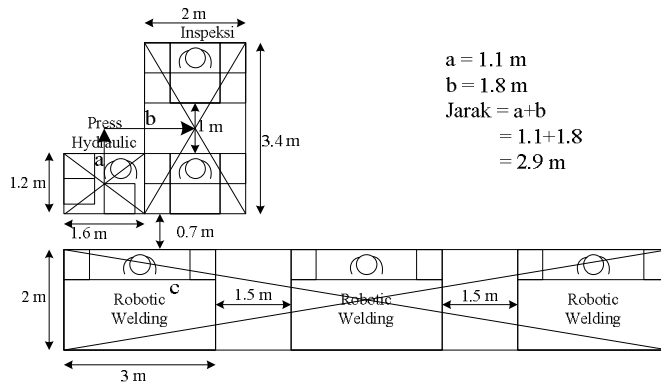
#### 4. Jarak dari P80T ke Robotic Welding



#### 5. Jarak dari Robotic Welding ke Press Hydraulic

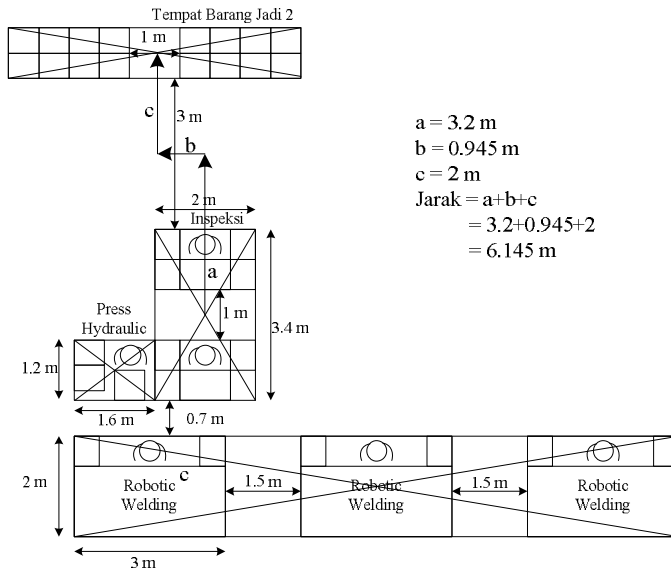


6. Jarak dari Press Hydraulic ke Inspeksi



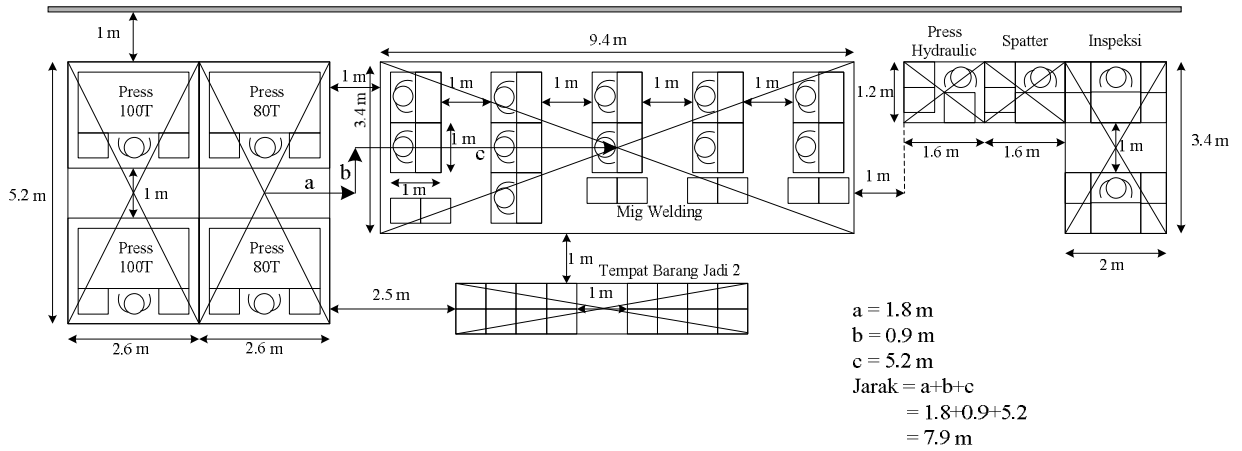
$$\begin{aligned}
 a &= 1.1 \text{ m} \\
 b &= 1.8 \text{ m} \\
 \text{Jarak} &= a+b \\
 &= 1.1+1.8 \\
 &= 2.9 \text{ m}
 \end{aligned}$$

7. Jarak dari Inspeksi ke Tempat Barang Jadi 2

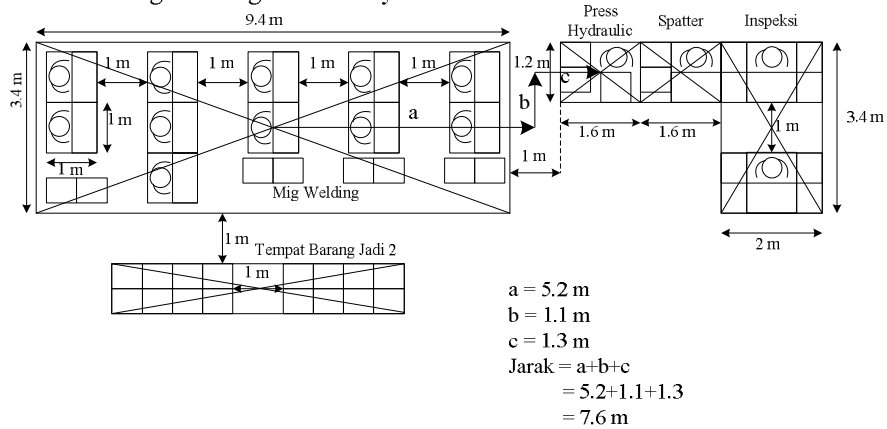


$$\begin{aligned}
 a &= 3.2 \text{ m} \\
 b &= 0.945 \text{ m} \\
 c &= 2 \text{ m} \\
 \text{Jarak} &= a+b+c \\
 &= 3.2+0.945+2 \\
 &= 6.145 \text{ m}
 \end{aligned}$$

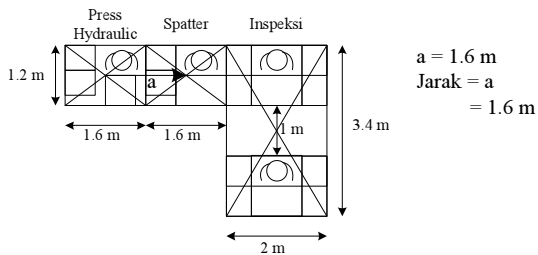
### 8. Jarak dari P80T ke Mig Welding



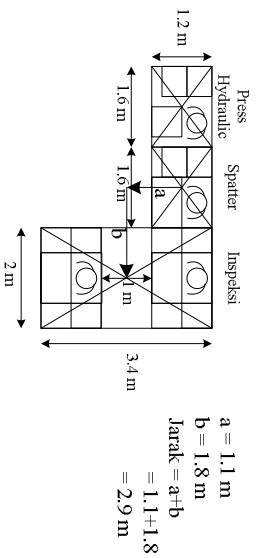
### 9. Jarak dari Mig Welding ke Press Hydraulic



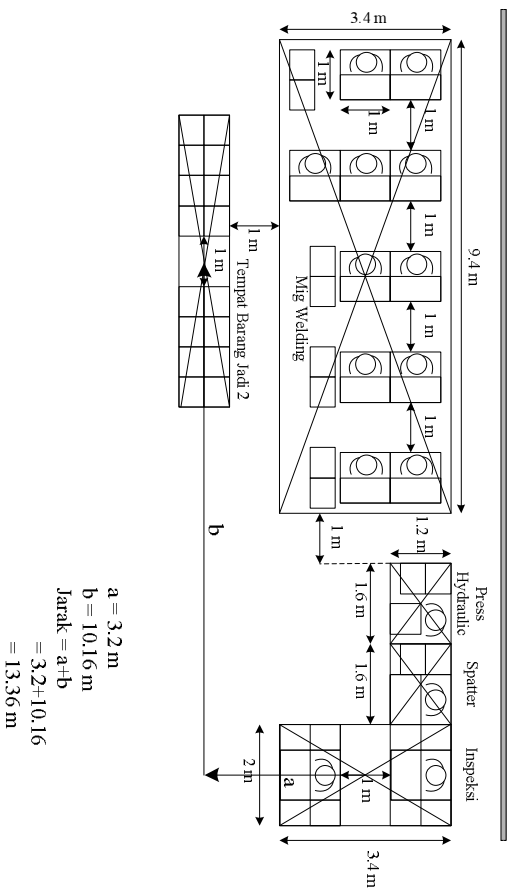
### 10. Jarak dari Press Hydraulic ke Spatter Release



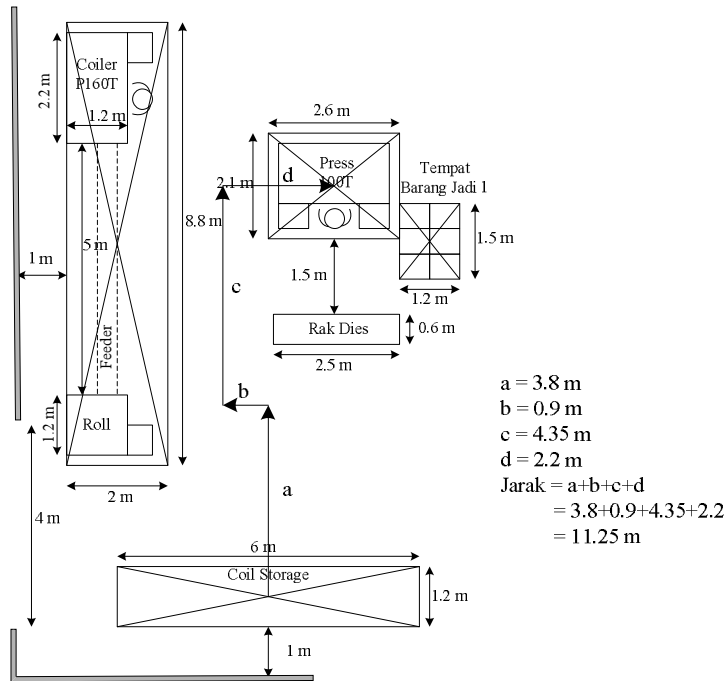
### 11. Jarak dari Spatter Release ke Inspeksi



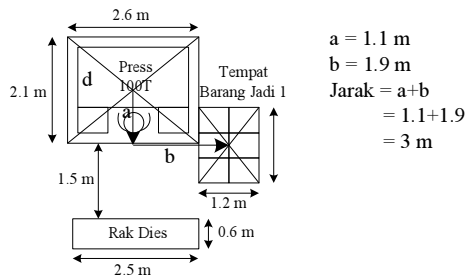
### 12. Jarak dari Inspeksi ke Tempat Barang Jadi 2



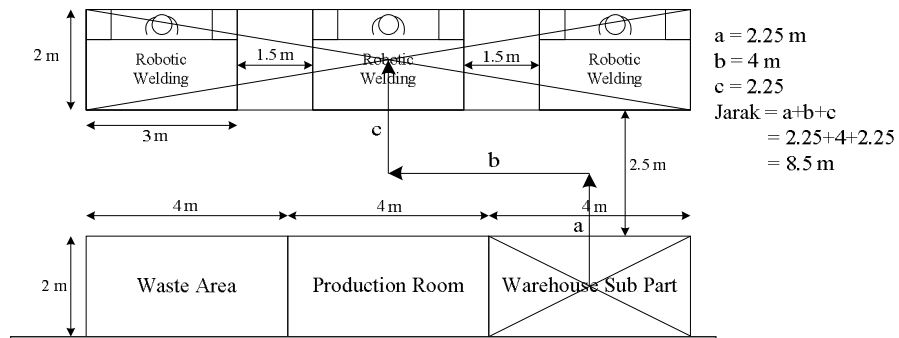
13. Jarak dari Coil Storage ke P100T



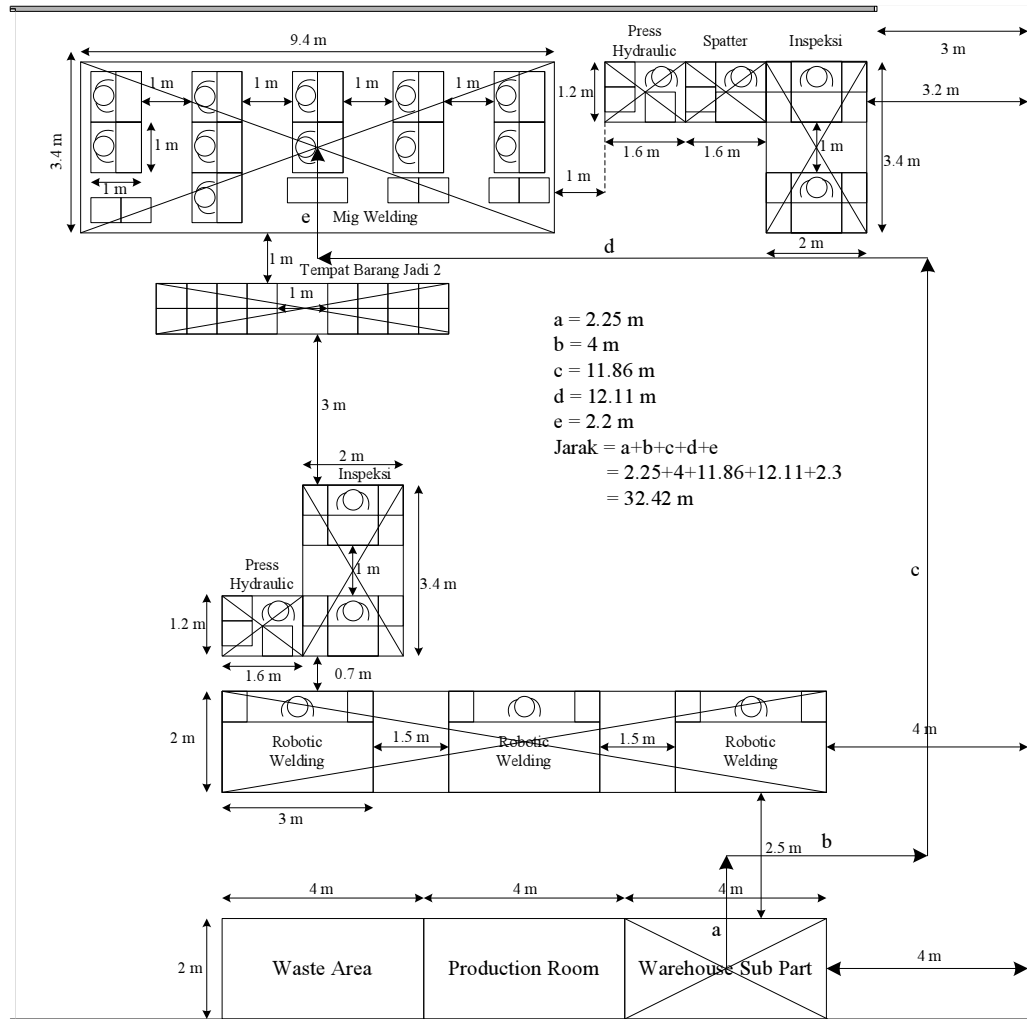
14. Jarak dari P100T ke Tempat Barang Jadi 1



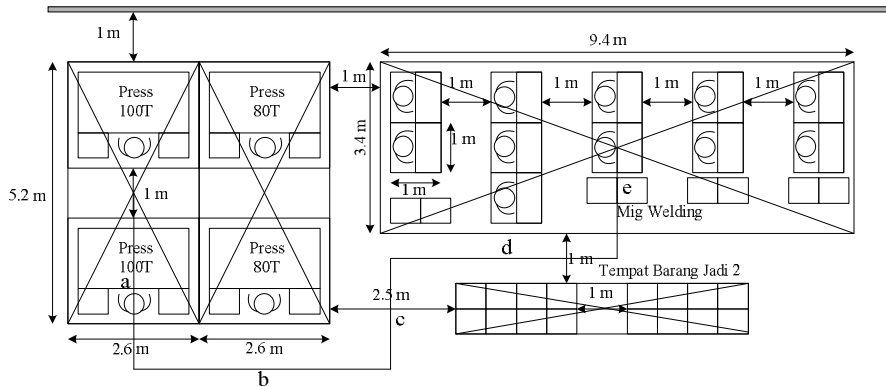
15. Jarak dari Warehouse ke Robotic Welding



### 16. Jarak dari Warehouse ke Mig Welding

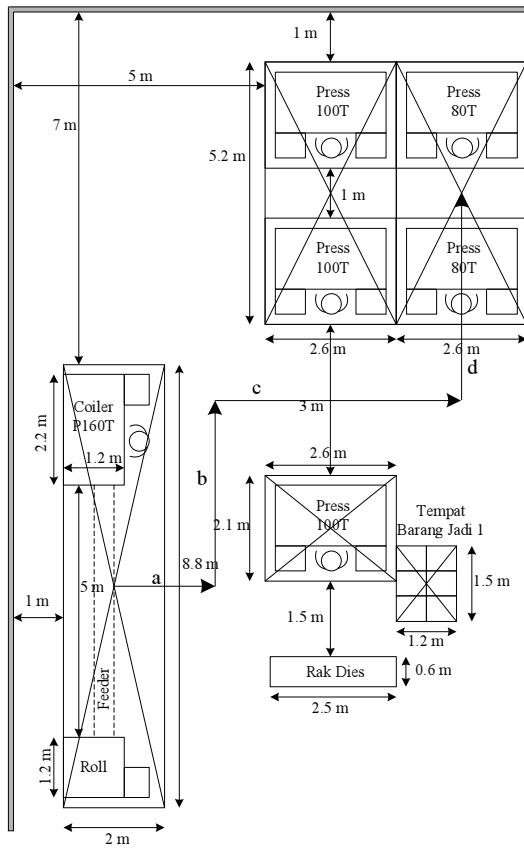


17. Jarak dari P100T ke Mig Welding



$$\begin{aligned}
 a &= 3.5 \text{ m} \\
 b &= 5.1 \text{ m} \\
 c &= 2.2 \text{ m} \\
 d &= 4.5 \text{ m} \\
 e &= 2.2 \text{ m} \\
 \text{Jarak} &= a+b+c+d+e \\
 &= 3.5+5.1+2.2+4.5+2.2 \\
 &= 17.5 \text{ m}
 \end{aligned}$$

18. Jarak dari Coiler P160T ke P80T



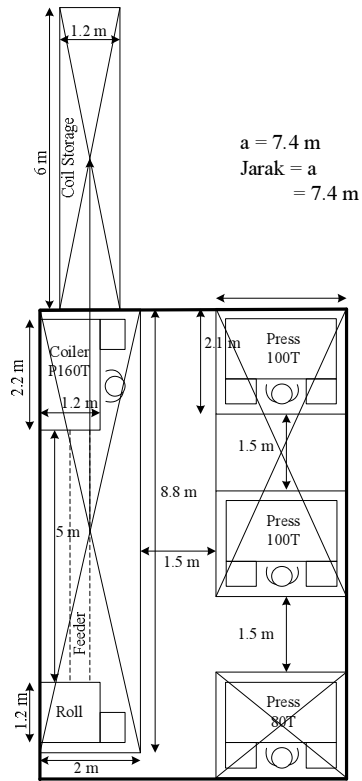
$$\begin{aligned}
 a &= 2 \text{ m} \\
 b &= 3.69 \text{ m} \\
 c &= 4.89 \text{ m} \\
 d &= 4.1 \text{ m} \\
 \text{Jarak} &= a+b+c+d \\
 &= 2+3.69+4.89+4.1 \\
 &= 14.68 \text{ m}
 \end{aligned}$$

# LAMPIRAN C

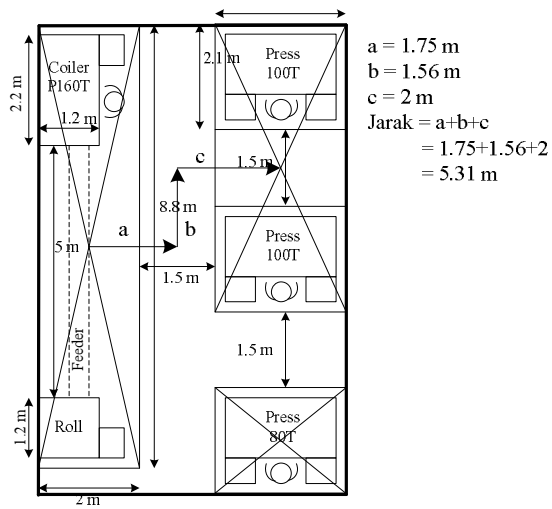
JARAK TATA LETAK USULAN



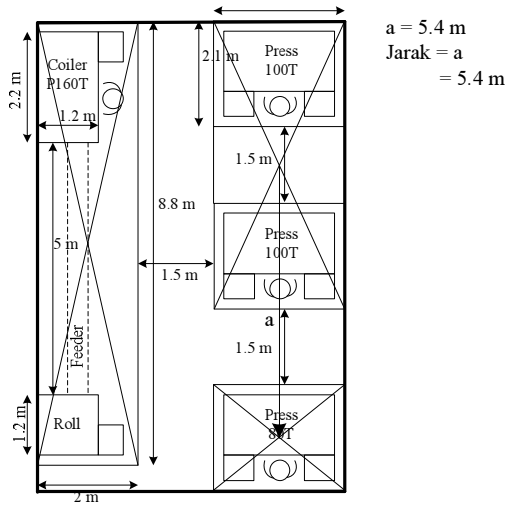
1. Jarak dari Coil Storage ke Coiler P160T



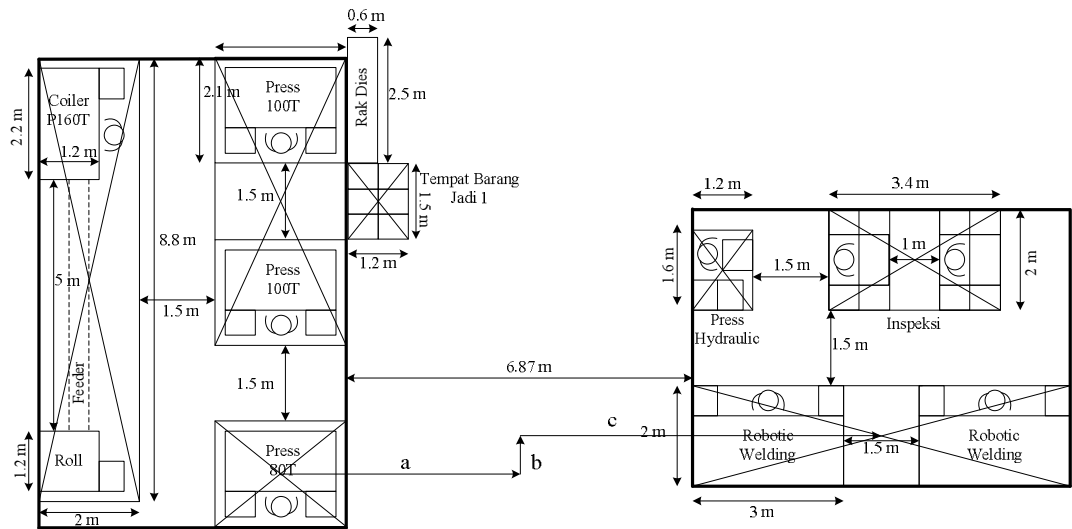
2. Jarak dari Coiler P160T ke P100T



### 3. Jarak dari P100T ke P80T

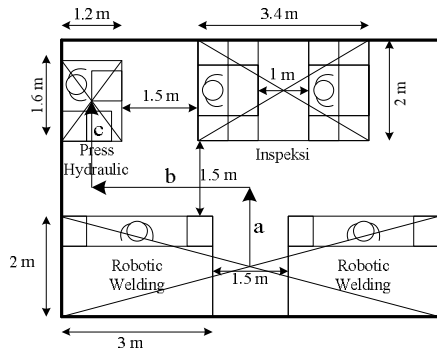


### 4. Jarak dari P80T ke Robotic Welding



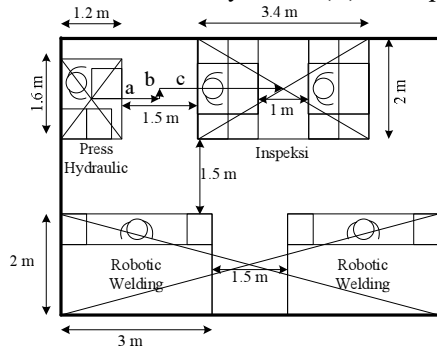
$$\begin{aligned}
 a &= 4.76 \text{ m} \\
 b &= 0.75 \text{ m} \\
 c &= 7.15 \text{ m} \\
 \text{Jarak} &= a+b \\
 &= 4.76+0.75+7.15 \\
 &= 12.66 \text{ m}
 \end{aligned}$$

5. Jarak dari Robotic Welding ke Press Hydraulic (B)



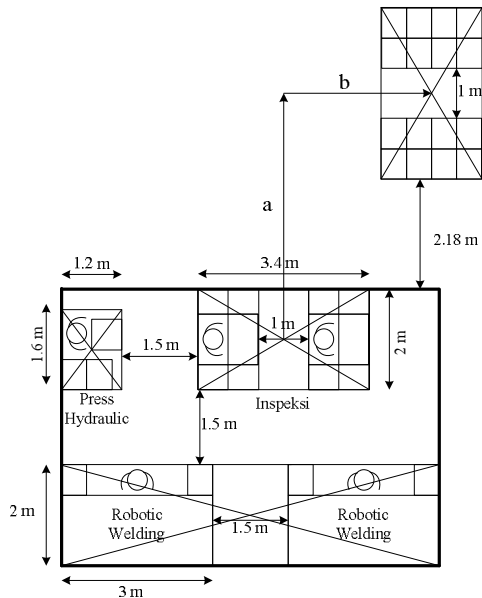
$$\begin{aligned}
 a &= 1.57 \text{ m} \\
 b &= 3.1 \text{ m} \\
 c &= 1.7 \text{ m} \\
 \text{Jarak} &= a+b+c \\
 &= 1.57+3.1+1.7 \\
 &= 6.37 \text{ m}
 \end{aligned}$$

6. Jarak dari Press Hydraulic (B) ke Inspeksi (B)



$$\begin{aligned}
 a &= 1.35 \text{ m} \\
 b &= 0.2 \text{ m} \\
 c &= 2.45 \text{ m} \\
 \text{Jarak} &= a+b+c \\
 &= 1.35+0.2+2.45 \\
 &= 4 \text{ m}
 \end{aligned}$$

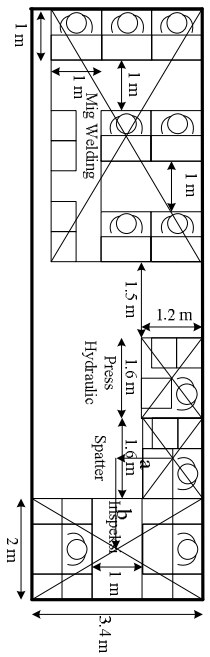
7. Jarak dari Inspeksi (B) ke Tempat Barang Jadi 2



$$\begin{aligned}
 a &= 4.88 \text{ m} \\
 b &= 2.9 \text{ m} \\
 \text{Jarak} &= a+b \\
 &= 4.88+2.9 \\
 &= 7.78 \text{ m}
 \end{aligned}$$

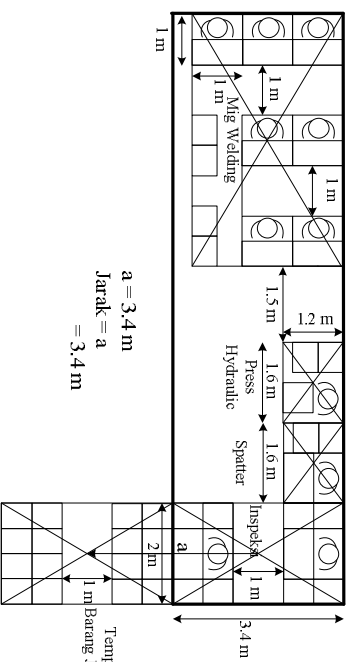


## 11. Jarak dari Spatter Release ke Inspeksi (A)



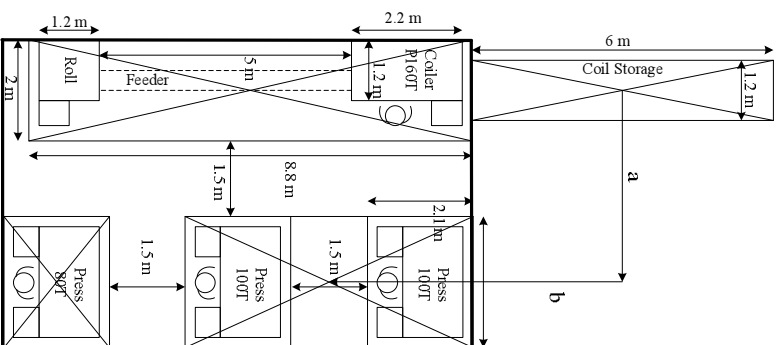
$$\begin{aligned} a &= 1.1 \text{ m} \\ b &= 1.8 \text{ m} \\ \text{Jarak} &= a+b \\ &= 1.1+1.8 \\ &= 2.9 \text{ m} \end{aligned}$$

## 12. Jarak dari Inspeksi (A) ke Tempat Barang Jadi 2



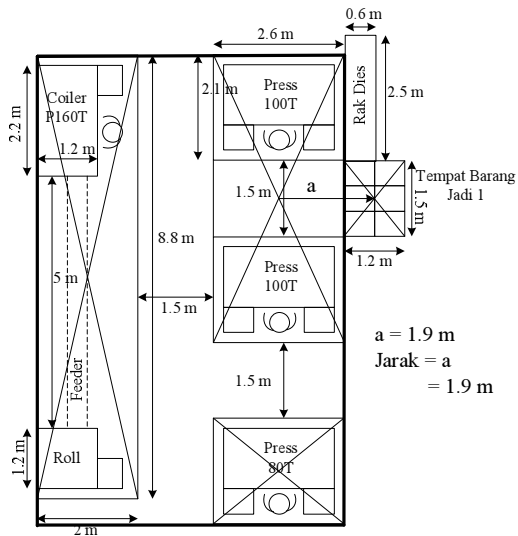
$$\begin{aligned} a &= 3.4 \text{ m} \\ \text{Jarak} &= a \\ &= 3.4 \text{ m} \end{aligned}$$

## 13. Jarak dari Coil Storage ke P100T

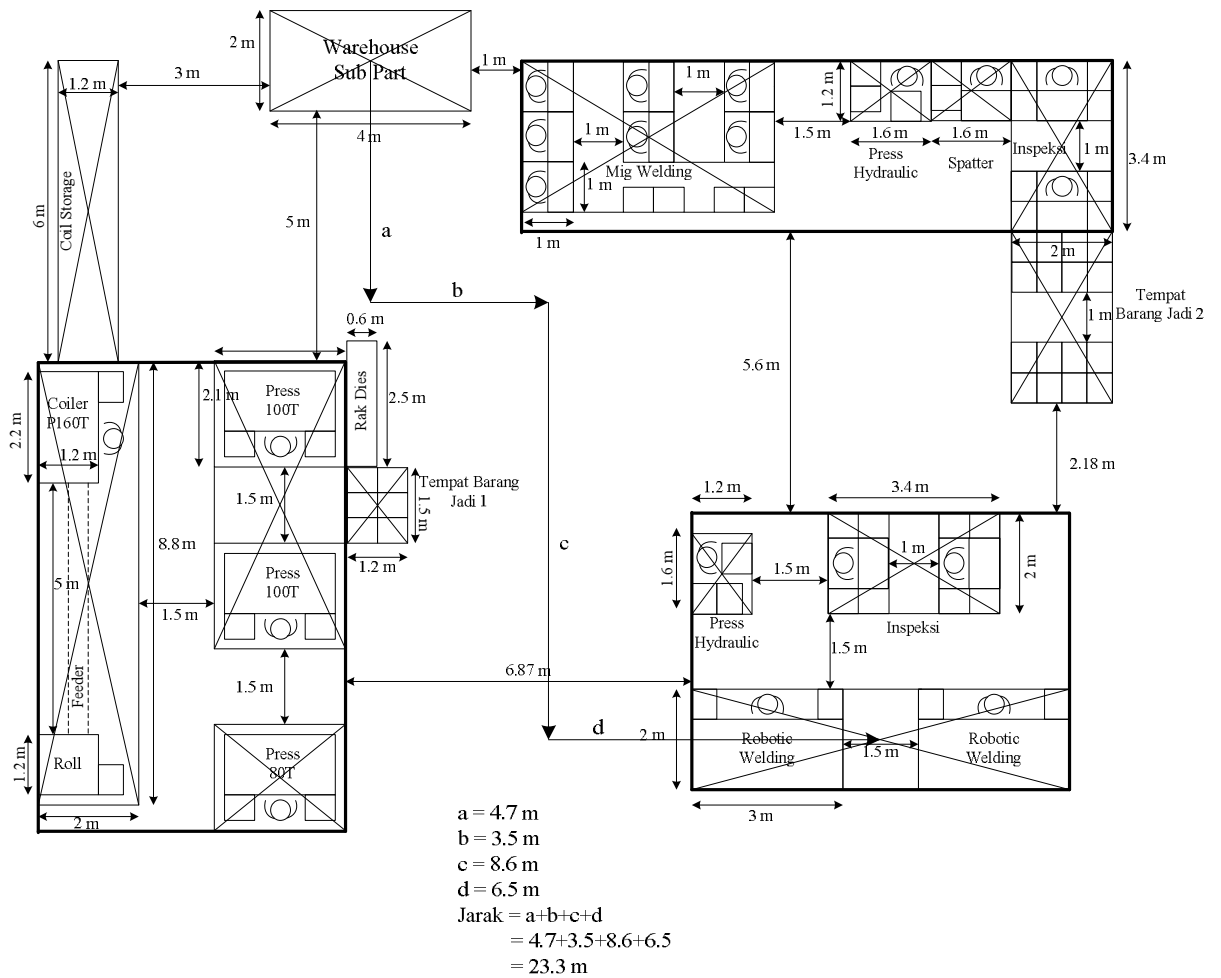


$$\begin{aligned} a &= 3.8 \text{ m} \\ b &= 5.8 \text{ m} \\ \text{Jarak} &= a+b \\ &= 3.8+5.8 \\ &= 9.6 \text{ m} \end{aligned}$$

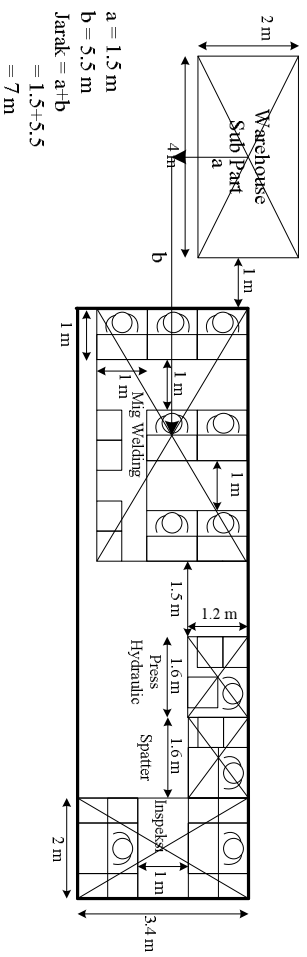
14. Jarak dari P100T ke Tempat Barang Jadi 1



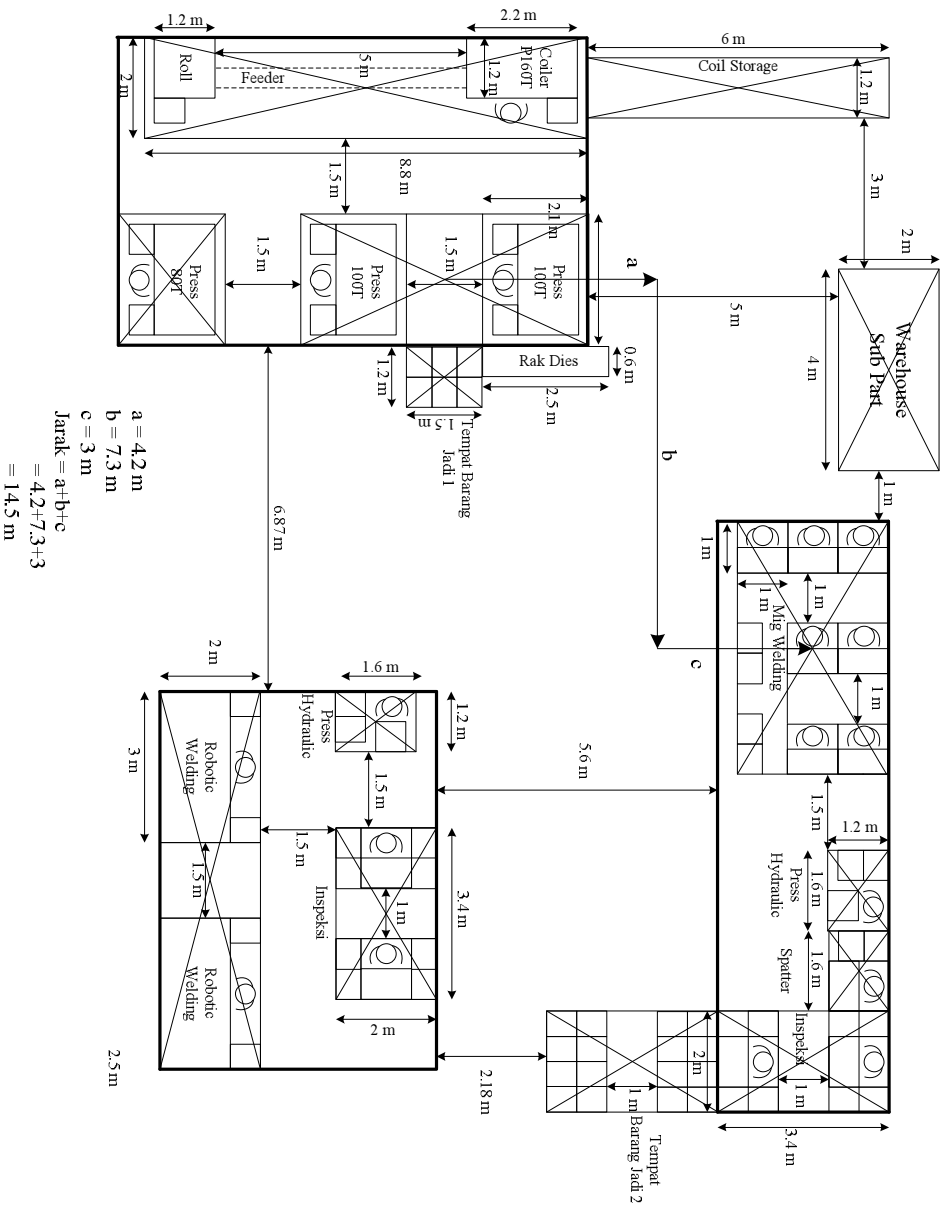
15. Jarak dari Warehouse ke Robotic Welding



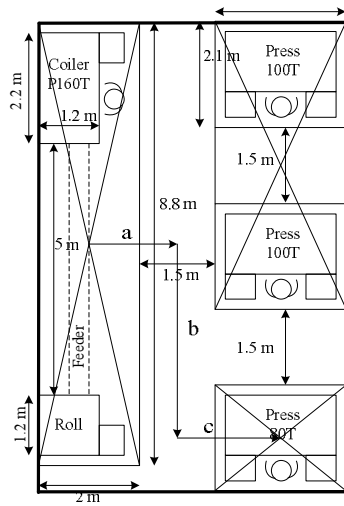
16. Jarak dari Warehouse ke Mig Welding



17. Jarak dari P100T ke Mig Welding



18. Jarak dari Coiler P160T ke P80T



$$\begin{aligned} a &= 1.75 \text{ m} \\ b &= 3.85 \text{ m} \\ c &= 2 \text{ m} \\ \text{Jarak} &= a+b+c \\ &= 1.75+3.85+2 \\ &= 7.6 \text{ m} \end{aligned}$$