

ABSTRACT

Intermediate goods and raw material data processing that still manual become computerized initially will help a place of business to process data, one of the factors supporting data processing in a production process is engine scheduling. Processing of existing data would be converted into a purchase and sale application. This application is also divided into several parts like raw material data, goods data, purchasing data, sales data, engine data, production data, and reports data. The advantage of this application is facilitate the business place to process data, and allows admins to get more information about raw materials, goods, purchasing, sales, machine, production, report data that exist in a place of business. Approximate calculation of the production of a good help to estimate how long a product is produced which has a relationship with incoming orders.

Keywords: Purchase and Sales Applications, Machine Scheduling, Production.

ABSTRAK

Peralihan pengolahan data barang dan bahan yang awalnya masih manual menjadi terkomputerisasi akan sangat membantu suatu tempat usaha untuk mengolah data-datanya, salah satu faktor pendukung pengolahan data dalam suatu proses produksi yaitu mengenai penjadwalan mesin. Pengolahan data yang ada akan dirubah menjadi sebuah aplikasi pembelian dan penjualan. Aplikasi ini juga dibagi menjadi beberapa bagian inti, antara lain data bahan, data barang, data pembelian ,data penjualan, data mesin, data produksi, dan data laporan. Keuntungan dari aplikasi ini adalah memudahkan pihak tempat usaha untuk mengolah data-datanya, serta memudahkan *admin* untuk mendapatkan informasi lebih tentang bahan, barang, pembelian , penjualan, mesin, produksi, data laporan yang ada pada suatu tempat usaha. Perkiraan perhitungan produksi suatu barang membantu memperkirakan berapa lama suatu barang diproduksi yang memiliki hubungan dengan pesanan yang masuk.

Kata Kunci: Aplikasi Pembelian dan Penjualan, Penjadwalan Mesin, Produksi.

DAFTAR ISI

PRAKATA.....	i
ABSTRACT	ii
ABSTRAK.....	iii
DAFTAR ISI.....	iv
DAFTAR GAMBAR	x
DAFTAR TABEL	xiv
DAFTAR LAMPIRAN	xvi
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang Masalah	1
I.2 Rumusan Masalah	2
I.3 Tujuan Pembahasan.....	2
I.4 Batasan Masalah	3
I.5 Sumber Data.....	4
I.6 Sistematika Penyajian.....	4
BAB II KAJIAN TEORI	6
II.1 <i>Microsoft Visual Studio</i>	6
II.1.1 Latar Belakang <i>Visual Studio</i>	6
II.1.2 Definisi <i>.NET</i>	7
II.1.3 Pengertian <i>C#</i>	8
II.1.4 Latar Belakang <i>C#</i>	8
II.1.5 Kelebihan <i>C#</i>	10
II. 2. <i>SQL Server</i>	10
II.2.1 Pengertian <i>SQL Server</i>	10
II.2.2 Administrator Basis Data.....	11
II. 3. <i>Use Case Diagram</i>	11
II.3.1 Pengertian <i>Use Case Diagram</i>	11
II.3.2 <i>Class Diagram</i>	15
II.3.3 <i>Activity Diagram</i>	17
II.4 <i>ERD (Entity Relationship Diagram)</i>	19
II.4.1 Komponen <i>ERD</i>	19
II.4.2 Kardinalitas Relasi	20
II.5 Proses Bisnis	23
II.5.1 Definisi Proses Bisnis.....	23
II.5.2 Komponen <i>Flowchart</i>	24
II.6 Produksi.....	25
II.6.1 Proses Produksi	25
II.6.2 Perencanaan dan Pengendalian Produksi.....	26
II.6.3 Prosedur Perencanaan Produk	27
II.6.4 Pengembangan Perencanaan dan Pengendalian Produksi dengan MRP ...	27
II.7 Algoritma.....	28
II.8 First In First Out	30
II.9 Black Box Testing.....	31

BAB III ANALISIS DAN RANCANGAN SISTEM	32
III.1 Proses Bisnis	32
III.1.1 Profile Usaha.....	32
III.2 Analisis Proses Bisnis	33
III.2.1 <i>Flowchart</i> Pembelian.....	33
III.2.2 <i>Flowchart</i> Penjualan.....	34
III.2.3 <i>Flowchart</i> Permintaan Produksi.....	36
III.2.4 <i>Flowchart</i> Produksi.....	39
III.2.5 <i>Flowchart</i> Retur Benang.....	40
III.2.6 <i>Flowchart</i> Piutang Dagang	41
III.2.7 <i>Flowchart</i> Pencacatan Lunas	42
III.3 Perancangan	43
III.3.1 <i>Entity Relationship Diagram</i>	43
III.3.2 ERD to Tabel.....	44
III.3.3 <i>Use Case</i>	51
III.3.3.1 <i>Use Case</i> Rajut.....	51
III.3.3.2 <i>Use Case</i> Login.....	52
III.3.3.3 <i>Use Case</i> Barang	53
III.3.3.4 <i>Use Case</i> Bahan	54
III.3.3.5 <i>Use Case</i> Pembelian.....	55
III.3.3.6 <i>Use Case</i> Penjualan.....	56
III.3.3.7 <i>Use Case</i> Retur.....	57
III.3.3.8 <i>Use Case</i> Pesanan	58
III.3.3.9 <i>Use Case</i> Produksi.....	59
III.3.3.10 <i>Use Case</i> Supplier	60
III.3.3.11 <i>Use Case</i> Pelanggan	61
III.3.3.12 <i>Use Case</i> Mesin	62
III.3.3.13 <i>Use Case</i> Laporan	63
III.3.4 <i>Activity Diagram</i>	64
III.3.4.1 <i>Activity Diagram</i> Login.....	64
III.3.4.2 <i>Activity Diagram</i> Tambah Data Pembelian	65
III.3.4.3 <i>Activity Diagram</i> Ubah Data Pembelian.....	66
III.3.4.4 <i>Activity Diagram</i> Hapus Data Pembelian	67
III.3.4.5 <i>Activity Diagram</i> Cari Data Pembelian.....	68
III.3.4.6 <i>Activity Diagram</i> Laporan Pembelian.....	69
III.3.4.7 <i>Activity Diagram</i> Tambah Data Penjualan	70
III.3.4.8 <i>Activity Diagram</i> Tambah Data Retur	71
III.3.4.9 <i>Activity Diagram</i> Ubah Data Penjualan.....	72
III.3.4.10 <i>Activity Diagram</i> Hapus Data Penjualan	73
III.3.4.11 <i>Activity Diagram</i> Cari Data Penjualan.....	74
III.3.4.12 <i>Activity Diagram</i> Laporan Penjualan.....	75
III.3.4.13 <i>Activity Diagram</i> Tambah Data Piutang	76
III.3.4.14 <i>Activity Diagram</i> Hapus Data Piutang.....	77
III.3.4.15 <i>Activity Diagram</i> Tambah Barang	78

III.3.4.16 Activity Diagram Ubah Data Barang	79
III.3.4.17 Activity Diagram Cari Data Barang	80
III.3.4.18 Activity Diagram Tambah Data Pesanan	81
III.3.4.19 Activity Diagram Ubah Data Pesanan.....	82
III.3.4.20 Activity Diagram Hapus Data Pesanan.....	83
III.3.4.21 Activity Diagram Cari Data Pesanan.....	84
III.3.4.22 Activity Diagram Laporan Pesanan	85
III.3.4.23 Activity Diagram Tambah Data <i>Supplier</i>	86
III.3.4.24 Activity Diagram Ubah Data <i>Supplier</i>	87
III.3.4.25 Activity Diagram Cari Data <i>Supplier</i>	88
III.3.4.26 Activity Diagram Tambah Data Pelanggan	89
III.3.4.27 Activity Diagram Ubah Data Pelanggan.....	90
III.3.4.28 Activity Diagram Cari Data Pelanggan.....	91
III.3.4.29 Activity Diagram Cari Data Produksi.....	92
III.3.4.30 Activity Diagram Laporan Produksi.....	93
III.3.4.31 Activity Diagram Cetak Laporan	94
III.3.5 Class Diagram.....	95
III.3.6 Sketsa User Interface	108
III.3.6.1 Form Sketsa Main Form	108
III.3.6.2 Form Sketsa Login	109
III.3.6.3 Form Sketsa Ubah Login.....	110
III.3.6.4 Form Sketsa Barang	111
III.3.6.5 Form Sketsa Ubah Barang	112
III.3.6.6 Form Sketsa Barang Detail	113
III.3.6.7 Form Sketsa Link Barang.....	114
III.3.6.8 Form Sketsa Bahan.....	115
III.3.6.9 Form Sketsa Ubah Bahan	116
III.3.6.10 Form Sketsa Bahan Detail.....	117
III.3.6.11 Form Sketsa Link Bahan	118
III.3.6.12 Form Sketsa Pembelian	119
III.3.6.13 Form Sketsa LinkPembelianDetail.....	120
III.3.6.14 Form Sketsa Total Pembelian	121
III.3.6.15 Form Sketsa Penjualan	122
III.3.6.16 Form Sketsa LinkPenjualanDet	123
III.3.6.17 Form Sketsa Total Penjualan	124
III.3.6.18 Form Sketsa <i>Supplier</i>	125
III.3.6.19 Form Sketsa Ubah <i>Supplier</i>	126
III.3.6.20 Form Sketsa Link <i>Supplier</i>	127
III.3.6.21 Form Total Produksi	128
III.3.6.22 Form Sketsa Pesanan	129
III.3.6.23 Form Sketsa Link Pesanan Det.....	130
III.3.6.24 Form Sketsa Total Pesanan	131
III.3.6.25 Form Sketsa Pelanggan	132
III.3.6.26 Form Sketsa Ubah Pelanggan.....	133

III.3.6.27 <i>Form Sketsa Link Pelanggan</i>	134
III.3.6.28 <i>Form Sketsa Mesin</i>	135
III.3.6.29 <i>Form Sketsa Mesin Detail</i>	136
III.3.6.30 <i>Form Sketsa Ubah Mesin</i>	137
III.3.6.31 <i>Form Sketsa Piutang</i>	138
III.3.6.32 <i>Form Sketsa Retur</i>	139
III.3.6.33 <i>Form Sketsa Kebutuhan</i>	140
III.3.6.34 <i>Form Sketsa Ubah Kebutuhan</i>	141
BAB IV HASIL PENELITIAN	142
IV. <i>Application</i>	142
IV. 1 <i>Login</i>	142
IV. 1.1 <i>Ubah Login</i>	143
IV. 2 <i>MDI Parent System</i>	144
IV. 3 <i>Persediaan</i>	145
IV. 3.1 <i>Barang</i>	145
IV. 3.1.1 <i>Ubah Barang</i>	146
IV. 3.2 <i>Bahan</i>	147
IV. 3.2.1 <i>Ubah Bahan</i>	148
IV. 4 <i>Transaksi</i>	149
IV. 4.1 <i>Pembelian</i>	149
IV. 4.1.1 <i>Total Pembelian</i>	150
IV. 4.1.2 <i>Link Pembelian Detail</i>	151
IV. 4.2 <i>Penjualan</i>	152
IV. 4.2.1 <i>Total Penjualan</i>	153
IV. 4.2.2 <i>Link Penjualan Detail</i>	154
IV. 5 <i>Piutang</i>	155
IV. 6 <i>Retur</i>	156
IV. 6.1 <i>Lihat Retur</i>	157
IV. 7 <i>Supplier</i>	158
IV. 7.1 <i>Ubah Supplier</i>	159
IV. 8 <i>Pelanggan</i>	160
IV. 8.1 <i>Ubah Pelanggan</i>	161
IV. 9 <i>Pesanan</i>	162
IV. 9.1 <i>Total Pesanan</i>	163
IV. 10 <i>Bahan Detail</i>	164
IV. 11 <i>Produksi</i>	165
IV. 12 <i>Kebutuhan</i>	166
IV. 12.1 <i>Ubah Kebutuhan</i>	167
IV. 13 <i>Mesin</i>	168
IV. 13.1 <i>Ubah Mesin</i>	169
IV. 13.2 <i>Mesin (Waktu Proses)</i>	170
IV. 14 <i>Link</i>	172
IV. 14.1 <i>Link Bahan</i>	172
IV. 14.2 <i>Link Barang</i>	173

IV. 14.3 <i>Link Supplier</i>	174
IV. 14.4 <i>Link Pelanggan</i>	175
IV. 14.5 <i>Link Retur</i>	176
IV. 14.6 <i>Link Pesanan Det.</i>	177
IV. 15 Laporan	178
IV. 15.1 Nota Penjualan	178
IV. 15.2 Laporan Bahan	179
IV. 15.3 Laporan Bahan Detail	180
IV. 15.4 Laporan Barang	181
IV. 15.5 Laporan Mesin	182
IV. 15.6 Laporan Pelanggan.....	183
IV. 15.7 Laporan Pembelian.....	184
IV. 15.8 Laporan Penjualan.....	185
IV. 15.9 Laporan Pesanan.....	186
IV. 15.10 Laporan Piutang.....	187
IV. 15.11 Laporan Produksi.....	188
IV. 15.12 Laporan Retur.....	189
IV. 15.13 Laporan Supplier.....	190
IV. 15.14 Laporan Keuntungan	191
BAB V PEMBAHASAN DAN UJI COBA HASIL PENELITIAN	192
V.1 <i>Form Desktop</i>	192
V.1.1 <i>Form Login</i>	192
V.1.2 <i>Form main Form</i>	193
V.1.3 <i>Form Tambah Barang</i>	195
V.1.4 <i>Form Ubah Barang</i>	196
V.1.5 <i>Form Tambah Bahan</i>	197
V.1.6 <i>Form Ubah Bahan</i>	198
V.1.7 <i>Form Total Pembelian</i>	198
V.1.8 <i>Form Pembelian</i>	199
V.1.9 <i>Form Link Pembelian Detail</i>	199
V.1.10 <i>Form Total Penjualan</i>	200
V.1.11 <i>Form Penjualan</i>	200
V.1.12 <i>Form Piutang</i>	201
V.1.13 <i>Form Link Penjualan Detail</i>	201
V.1.14 <i>Form Retur</i>	202
V.1.15 <i>Form Pesanan</i>	202
V.1.16 <i>Form Kebutuhan</i>	203
V.1.17 <i>Form Mesin (Mesin)</i>	204
V.1.18 <i>Form Tambah Supplier</i>	204
V.1.19 <i>Form Ubah Supplier</i>	205
V.1.20 <i>Form Tambah Pelanggan</i>	205
V.1.21 <i>Form Ubah Pelanggan</i>	206
V.1.22 Rekapitulasi Hasil User Acceptance User	206
BAB VI SIMPULAN DAN SARAN	208

VI.1 Simpulan	208
VI.2 Saran – Saran	209
DAFTAR PUSTAKA.....	300

DAFTAR GAMBAR

Gambar 1 <i>Actors</i>	12
Gambar 2 <i>Use Cases</i>	13
Gambar 3 <i>Relationship</i>	13
Gambar 4 Use Case diagram	14
Gambar 5 Bagian-bagian Class	16
Gambar 6 Gambar <i>Interfaces</i>	16
Gambar 7 Gambar <i>Class</i>	17
Gambar 8 Contoh Activity Diagram.....	18
Gambar 9 <i>One to one</i>	22
Gambar 10 <i>One to many</i>	22
Gambar 11 <i>Many to one</i>	22
Gambar 12 <i>Many to many</i>	22
Gambar 13 Perhitungan waktu proses tiap operasi.....	30
Gambar 14 <i>Flowchart</i> Pembelian.....	33
Gambar 15 Flowchart Penjualan.....	34
Gambar 16 Flowchart Permintaan Produksi.....	36
Gambar 17 Flowchart Produksi.....	39
Gambar 18 Flowchart Retur Benang.....	40
Gambar 19 Flowchart Piutang Dagang	41
Gambar 20 Flowchart Pencatatan Lunas	42
Gambar 21 <i>Entity Relationship Diagram</i>	43
Gambar 22 <i>Use Case</i> Rajut.....	51
Gambar 23 <i>Use Case Login</i>	52
Gambar 24 <i>Use Case</i> Barang.....	53
Gambar 25 <i>Use Case</i> Bahan.....	54
Gambar 26 <i>Use Case</i> Pembelian	55
Gambar 27 <i>Use Case</i> Penjualan	56
Gambar 28 <i>Use Case</i> Retur	57
Gambar 29 <i>Use Case</i> Pesanan	58
Gambar 30 <i>Use Case</i> Produksi	59
Gambar 31 <i>Use Case</i> Supplier	60
Gambar 32 <i>Use Case</i> Pelanggan	61
Gambar 33 <i>Use Case</i> Mesin.....	62
Gambar 34 <i>Use Case</i> Laporan	63
Gambar 35 Activity Diagram Login	64
Gambar 36 Activity Diagram Tambah Data Pembelian	65
Gambar 37 Activity Diagram Ubah Data Pembelian.....	66
Gambar 38 Activity Diagram Hapus Data Pembelian.....	67
Gambar 39 Activity Diagram Cari Data Pembelian.....	68
Gambar 40 Activity Diagram History Pembelian	69
Gambar 41 Activity Diagram Tambah Penjualan.....	70
Gambar 42 Activity Diagram Tambah Retur.....	71

Gambar 43 <i>Activity Diagram</i> Ubah Data Penjualan.....	72
Gambar 44 <i>Activity Diagram</i> Hapus Data Penjualan.....	73
Gambar 45 <i>Activity Diagram</i> Cari Data Penjualan.....	74
Gambar 46 <i>Activity Diagram</i> History Penjualan	75
Gambar 47 <i>Activity Diagram</i> Tambah Piutang	76
Gambar 48 <i>Activity Diagram</i> Hapus Data Piutang.....	77
Gambar 49 <i>Activity Diagram</i> Tambah Barang.....	78
Gambar 50 <i>Activity Diagram</i> Ubah Data Barang	79
Gambar 51 <i>Activity Diagram</i> Cari Data Barang.....	80
Gambar 52 <i>Activity Diagram</i> Tambah Pesanan	81
Gambar 53 <i>Activity Diagram</i> Ubah Data Pesanan	82
Gambar 54 <i>Activity Diagram</i> Hapus Data Pesanan.....	83
Gambar 55 <i>Activity Diagram</i> Cari Data Produksi.....	84
Gambar 56 <i>Activity Diagram</i> Laporan Pesanan	85
Gambar 57 <i>Activity Diagram</i> Tambah Data Supplier	86
Gambar 58 <i>Activity Diagram</i> Ubah Data Supplier	87
Gambar 59 <i>Activity Diagram</i> Cari Data Supplier	88
Gambar 60 <i>Activity Diagram</i> Tambah Data Pelanggan	89
Gambar 61 <i>Activity Diagram</i> Ubah Data Pelanggan	90
9Gambar 62 <i>Activity Diagram</i> Cari Data Pelanggan	91
Gambar 63 <i>Activity Diagram</i> Cari Data Produksi.....	92
Gambar 64 <i>Activity Diagram</i> Laporan Pesanan	93
Gambar 65 <i>Activity Diagram</i> Cetak Laporan.....	94
Gambar 66 <i>Form Sketsa Main Form</i>	108
Gambar 67 <i>Form Sketsa Login</i>	109
Gambar 68 <i>Form Sketsa Login</i>	110
Gambar 69 <i>Form Sketsa Barang</i>	111
Gambar 70 <i>Form Sketsa Ubah barang</i>	112
Gambar 71 <i>Form Sketsa Ubah Produksi</i>	113
Gambar 72 <i>Form Sketsa Link Barang</i>	114
Gambar 73 <i>Form Sketsa Bahan</i>	115
Gambar 74 <i>Form Sketsa Ubah Bahan</i>	116
Gambar 75 <i>Form Sketsa Produksi</i>	117
Gambar 76 <i>Form Sketsa Link Bahan</i>	118
Gambar 77 <i>Form Sketsa Pembelian</i>	119
Gambar 78 <i>Form Sketsa LinkPembelianDetail</i>	120
Gambar 79 <i>Form Sketsa Total Pembelian</i>	121
Gambar 80 <i>Form Sketsa Penjualan</i>	122
Gambar 81 <i>Form Sketsa LinkPenjualanDetail</i>	123
Gambar 82 <i>Form Sketsa Total Penjualan</i>	124
Gambar 83 <i>Form Sketsa Supplier</i>	125
Gambar 84 <i>Form Sketsa Ubah Supplier</i>	126
Gambar 85 <i>Form Sketsa Link Supplier</i>	127
Gambar 86 <i>Form Sketsa Total Produksi</i>	128

Gambar 87 <i>Form</i> Sketsa Pesanan.....	129
Gambar 88 <i>Form</i> Sketsa LinkPesananDet.....	130
Gambar 89 <i>Form</i> Sketsa LinkPesanan	131
Gambar 90 <i>Form</i> Sketsa Pelanggan.....	132
Gambar 91 <i>Form</i> Sketsa Ubah Pelanggan	133
Gambar 92 <i>Form</i> Sketsa Link Pelanggan	134
Gambar 93 <i>Form</i> Sketsa Mesin	135
Gambar 94 <i>Form</i> Sketsa Mesin Detail	136
Gambar 95 <i>Form</i> Sketsa Ubah Mesin.....	137
Gambar 96 <i>Form</i> Sketsa Piutang.....	138
Gambar 97 <i>Form</i> Sketsa Retur	139
Gambar 98 <i>Form</i> Sketsa Kebutuhan.....	140
Gambar 99 <i>Form</i> Sketsa Ubah Kebutuhan	141
Gambar 100 <i>Form Dekstop Login</i>	142
Gambar 101 <i>Form Dekstop Ubah Login</i>	143
Gambar 102 <i>Form MDI Parent System</i>	144
Gambar 103 <i>Form</i> Barang	145
Gambar 104 <i>Form</i> Ubah Barang.....	146
Gambar 105 <i>Form</i> Bahan	147
Gambar 106 <i>Form</i> Ubah Bahan.....	148
Gambar 107 <i>Form</i> Pembelian.....	149
Gambar 108 <i>Form</i> Total Pembelian	150
Gambar 109 <i>Form Link</i> Pembelian Detail	151
Gambar 110 <i>Form</i> Penjualan.....	152
Gambar 111 <i>Form</i> Total Penjualan	153
Gambar 112 <i>Form Link</i> Penjualan Detail	154
Gambar 113 <i>Form</i> Piutang	155
Gambar 114 <i>Form</i> Retur.....	156
Gambar 115 <i>Form</i> Lihat Retur	157
Gambar 116 <i>Form Supplier</i>	158
Gambar 117 <i>Form</i> Ubah <i>Supplier</i>	159
Gambar 118 <i>Form</i> Pelanggan.....	160
Gambar 119 <i>Form</i> Ubah Pelanggan	161
Gambar 120 <i>Form</i> Pesanan	162
Gambar 121 <i>Form</i> Total Pesanan.....	163
Gambar 122 <i>Form</i> Bahan Detail	164
Gambar 123 <i>Form</i> Produksi.....	165
Gambar 124 <i>Form</i> Kebutuhan	166
Gambar 125 <i>Form</i> Ubah Kebutuhan.....	167
Gambar 126 <i>Form</i> Mesin	168
Gambar 127 <i>Form</i> Ubah Mesin.....	169
Gambar 128 <i>Form</i> Mesin (Waktu Proses).....	170
Gambar 129 <i>Form</i> Mesin Detail	171
Gambar 130 <i>Form Link</i> Bahan.....	172

Gambar 131 <i>Form Link</i> Barang.....	173
Gambar 132 <i>Form Link</i> Supplier	174
Gambar 133 <i>Form Link</i> Pelanggan	175
Gambar 134 <i>Form Link</i> Retur	176
Gambar 135 <i>Form Link</i> Pesanan Det.....	177
Gambar 136 Laporan Nota Penjualan.....	178
Gambar 137 Laporan Bahan	179
Gambar 138 Laporan Bahan Detail	180
Gambar 139 Laporan Barang	181
Gambar 140 Laporan Mesin	182
Gambar 141 Laporan Pelanggan.....	183
Gambar 142 Laporan Pembelian	184
Gambar 143 Laporan Penjualan	185
Gambar 144 Laporan Pesanan.....	186
Gambar 145 Laporan Piutang.....	187
Gambar 146 Laporan Produksi.....	188
Gambar 147 Laporan Retur	189
Gambar 148 Laporan Supplier.....	190
Gambar 149 Laporan Keuntungan.....	191

DAFTAR TABEL

Tabel I Entitas ERD (Arohman, 2007).....	19
Tabel II Flowchart (Palupirini, 2003).....	24
Tabel III tbUserMember	44
Tabel IV tbBarang	44
Tabel V tbPembelian	44
Tabel VI tbPenjualan	44
Tabel VII tbPembelianDet	45
Tabel VIII tbPenjualanDet	45
Tabel IX tbPiutang	45
Tabel X tbRetur	46
Tabel XI tbBahan	46
Tabel XII tbMesin	46
Tabel XIII tbPesanan	47
Tabel XIV tbSupplier	47
Tabel XV tbTeleponSupp	47
Tabel XVI tbPelanggan	47
Tabel XVII tbTeleponPel	48
Tabel XVIII tbProduksi	48
Tabel XIX tbKebutuhan	48
Tabel XX tbKebutuhanDet	48
Tabel XXI tbBahanDet	49
Tabel XXII tbPesananDet	49
Tabel XXIII tbMesinDet	49
Tabel XXIV tbWaktu	50
Tabel XXV tbPiutang	50
Tabel XXVI <i>Class Diagram User Member</i>	95
Tabel XXVII <i>Class Diagram Session</i>	95
Tabel XXVIII <i>Class Diagram Barang</i>	95
Tabel XXIX <i>Class Diagram Bahan</i>	96
Tabel XXX <i>Class Diagram BahanDet</i>	96
Tabel XXXI <i>Class Diagram Pembelian</i>	97
Tabel XXXII <i>Class Diagram PembelianDet</i>	97
Tabel XXXIII <i>Class Diagram Supplier</i>	98
Tabel XXXIV <i>Class Diagram NoTeleponSupplier</i>	98
Tabel XXXV <i>Class Diagram Penjualan</i>	99
Tabel XXXVI <i>Class Diagram PenjualanDet</i>	99
Tabel XXXVII <i>Class Diagram Piutang</i>	100
Tabel XXXVIII <i>Class Diagram Pelanggan</i>	100
Tabel XXXIX <i>Class Diagram NoTeleponPelanggan</i>	101
Tabel XL <i>Class Diagram Waktu</i>	101
Tabel XLI <i>Class Diagram Pesanan</i>	102
Tabel XLII <i>Class Diagram PesananDet</i>	102

Tabel XLIII <i>Class Diagram</i> Retur	103
Tabel XLIV <i>Class Diagram</i> Produksi	103
Tabel XLV <i>Class Diagram</i> Mesin	104
Tabel XLVI <i>Class Diagram</i> MesinDet.....	104
Tabel XLVII <i>Class Diagram</i> KoneksiDataClass.....	105
Tabel XLVIII <i>Class Diagram</i> NoKebutuhanBarang.....	105
Tabel XLIX <i>Class Diagram</i> Kebutuhan.....	105
Tabel L <i>Class Diagram</i> KebutuhanDet.....	106
Tabel LI <i>Class Diagram</i> Timer	106
Tabel LII <i>Class Diagram</i>	107
Tabel LIII Evaluasi Form Login	192
Tabel LIV Evaluasi Main Form.....	193
Tabel LV Evaluasi <i>Form</i> Tambah Barang	195
Tabel LVI Evaluasi <i>Form</i> Ubah Barang.....	196
Tabel LVII Evaluasi <i>Form</i> Tambah Barang	197
Tabel LVIII Evaluasi <i>Form</i> Ubah Barang.....	198
Tabel LIX Evaluasi <i>Form</i> Pembelian.....	198
Tabel LX Evaluasi <i>Form</i> Pembelian.....	199
Tabel LXI Evaluasi <i>Form</i> Link Pembelian Detail	199
Tabel LXII Evaluasi <i>Form</i> Pembelian	200
Tabel LXIII Evaluasi <i>Form</i> Pembelian	200
Tabel LXIV Evaluasi <i>Form</i> Link Pembelian Detail	201
Tabel LXV Evaluasi <i>Form</i> Retur.....	202
Tabel LXVI Evaluasi <i>Form</i> Pesanan	202
Tabel LXVII Evaluasi <i>Form</i> Kebutuhan	203
Tabel LXVIII Evaluasi <i>Form</i> Mesin(Mesin)	204
Tabel LXIX Evaluasi <i>Form</i> Tambah <i>Supplier</i>	204
Tabel LXX Evaluasi <i>Form</i> Ubah <i>Supplier</i>	205
Tabel LXXI Evaluasi <i>Form</i> Tambah Pelanggan	205
Tabel LXXII Evaluasi <i>Form</i> Ubah Pelanggan.....	206
Tabel LXXIII Evaluasi Hasil User Acceptance User	206

DAFTAR LAMPIRAN

LEMBAR ACCEPTANCE TEST.....	A-1
LAMPIRAN A Curriculum Vitae.....	A-12
LAMPIRAN FOTO.....	A-13