

## DAFTAR ISI

<b>HALAMAN JUDUL .....</b>	<b>i</b>
<b>LEMBAR NOMOR PERSOALAN.....</b>	<b>ii</b>
<b>HALAMAN PENGESAHAN.....</b>	<b>iii</b>
<b>SURAT PERNYATAAN BEBAS PLAGIASI.....</b>	<b>iv</b>
<b>MOTTO .....</b>	<b>v</b>
<b>LEMBAR PERSEMBAHAN .....</b>	<b>vi</b>
<b>KATA PENGANTAR.....</b>	<b>vii</b>
<b>ABSTRACT .....</b>	<b>ix</b>
<b>INTISARI .....</b>	<b>x</b>
<b>DAFTAR ISI.....</b>	<b>xi</b>
<b>DAFTAR GAMBAR.....</b>	<b>xv</b>
<b>DAFTAR TABEL .....</b>	<b>xvi</b>
<b>BAB I PENDAHULUAN.....</b>	<b>1</b>
1.1 Latar belakang .....	1
1.2 Perumusan Masalah .....	2
1.3 Tujuan .....	2
1.4 Manfaat .....	3
1.5 Batasan Masalah.....	3
1.6 Metode Penelitian.....	3
1.7 Sistematika Penulisan .....	4
<b>BAB II DASAR TEORI.....</b>	<b>6</b>
2.1 Mesin <i>Welder Continuous Tandem Cold Mill</i> .....	6
2.2 Komponen Mesin <i>Welder</i> .....	7

2.2.1	<i>Welding Electrical Circuit</i>	7
2.2.2	<i>Built-in Double Rotating Shear</i>	7
2.2.3	<i>Built-in Flash Trimmer</i>	8
2.2.4	<i>Strip Hole Puncher</i>	9
2.2.5	<i>Neutral Fiber Strip Height Adjustment</i>	10
2.2.6	<i>Tools Car</i>	10
2.3	Pengertian Perawatan	11
2.3.1	Tujuan Perawatan	12
2.3.2	Jenis-Jenis Perawatan	12
2.3.3	Tugas dan Aktivitas Perawatan	16
2.4	Konsep Keandalan ( <i>Reliability</i> )	17
2.4.1	MTTF ( <i>Mean Time to Failure</i> )	17
2.4.2	MTTR ( <i>Mean Time to Repair</i> )	18
2.5	<i>Reliability Centered Maintenance (RCM)</i>	18
2.5.1	Prinsip-Prinsip RCM	19
2.5.2	Penerapan RCM	19
2.5.3	Kegiatan Perawatan	22
2.6	<i>Failure Mode and Effect Analysis (FMEA)</i>	22
2.7	<i>Risk Priority Number (RPN)</i>	23
2.8	<i>Logic Tree Analysis (LTA)</i>	26
2.9	Pemilihan Tindakan ( <i>Task Selection</i> )	27
2.10	Interval Waktu Perawatan	29
<b>BAB III METODE PENELITIAN</b>		<b>31</b>
3.1	Tempat dan Waktu Penelitian	31
3.2	Teknik Pengambilan Data	31

3.3 Kerangka Penelitian .....	31
3.3 Pengambilan Data .....	32
3.4 Metode Pengolahan Data .....	33
3.5 Analisa Data .....	34
3.6 Kesimpulan dan Saran.....	34
<b>BAB IV HASIL DAN PEMBAHASAN .....</b>	<b>35</b>
4.1 Pengumpulan Data .....	35
4.2 Pengolahan Data.....	35
4.2.1 Data Mesin <i>Welder</i> .....	35
4.2.2 <i>Functional Block Diagram</i> (FBD) .....	36
4.2.3 Penentuan Fungsi Sistem dan Kegagalan Fungsional.....	36
4.2.4 <i>Failure Mode and Effect Analysis</i> (FMEA) .....	37
4.2.5 <i>Logic Tree Analysis</i> (LTA) .....	37
4.2.6 Pemilihan Tindakan ( <i>Task Selection</i> ).....	37
4.2.7 <i>Reliability Centered Maintenance</i> (RCM) <i>Decision Worksheet</i> .....	38
4.3 Penentuan Pemeliharaan .....	46
<b>BAB V PENUTUP.....</b>	<b>48</b>
5.1 Kesimpulan.....	48
5.2 Saran.....	48
<b>DAFTAR PUSTAKA .....</b>	<b>50</b>
<b>LAMPIRAN.....</b>	<b>52</b>
Lampiran 1. <i>Function and Functional Failure</i> Mesin <i>Welder</i> .....	53
Lampiran 2. <i>Failure Modes and Effect Analyze</i> (FMEA) Mesin <i>Welder</i> . .....	55
Lampiran 3. <i>Logic Tree Analysis</i> (LTA) Mesin <i>Welder</i> .....	60
Lampiran 4. Pemilihan Tindakan ( <i>Task Selection</i> ) .....	63

Lampiran 5. <i>Risk Priority Number (RPN)</i> .....	69
Lampiran 6. <i>RCM Decision Worksheet</i> .....	77
Lampiran 7. Sket Gambar Mesin <i>Flash Butt Welder CTCM</i> .....	79