

DAFTAR ISI

ABSTRAK	i
ABSTRACT	ii
KATA PENGANTAR	iii
DAFTAR ISI	v
DAFTAR GAMBAR	x
DAFTAR TABEL	xi
DAFTAR SINGKATAN DAN LAMBANG	xiii
DAFTAR ISTILAH	xiv
DAFTAR LAMPIRAN	xv
BAB I PENDAHULUAN	1
1.1 Latar Belakang.....	1
1.2 Rumusan Masalah.....	4
1.3 Tujuan Penelitian.....	4
1.4 Batasan Penelitian.....	5
1.5 Manfaat Penelitian.....	5
1.6 Sistematika Penulisan.....	5
BAB II LANDASAN TEORI	7
II.1 Manajemen Perawatan.....	7
II.2 <i>Preventive Maintenance</i>	7
II.3 <i>Corrective Maintenance</i>	7
II.4 <i>Mean Time to Failure (MTTF)</i>	8
II.5 <i>Mean Time to Repair (MTTR)</i>	8
II.6 <i>Life Cycle Cost (LCC)</i>	9
II.6.1 <i>Maintenance Crew</i>	10
II.6.2 <i>Sustaining Cost</i>	10

II.6.3	<i>Operating Cost</i>	11
II.6.4	<i>Maintenance Cost</i>	11
II.6.5	<i>Book Value</i>	11
II.6.6	<i>Shortage Cost</i>	11
II.6.7	<i>Acquisition Cost</i>	11
II.6.8	<i>Purchasing Cost</i>	12
II.6.9	<i>Population Cost</i>	12
II.7	<i>Overall Equipment Effectiveness (OEE)</i>	12
II.7.1	<i>Availability</i>	13
II.7.2	<i>Performance Rate</i>	13
II.7.3	<i>Rate of Quality Product</i>	14
II.8	<i>Six Big Losses</i>	14
II.9	Pemilihan Metode.....	16
II.10	Studi Literatur.....	17
II.10.1	Perbandingan dengan Penelitian Sebelumnya	17
BAB III	METODOLOGI PENELITIAN	19
III.1	Model Konseptual.....	19
III.2	Sistematika Pemecahan Masalah	22
III.2.1	Tahap Inisialisasi	23
III.2.2	Tahap Pengumpulan Data.....	25
BAB IV	PENGUMPULAN DAN PENGOLAHAN DATA	30
IV.1	Pengumpulan Data.....	30
IV.1.1	Deskripsi Mesin 1110 JC dan Objek Penelitian	30
IV.1.2	Kegiatan Perawatan Mesin 1110 JC.....	30
IV.1.3	Data Waktu Antar Perbaikan (<i>Time To Repair</i>)	31
IV.1.4	Data Waktu Antar Kerusakan (<i>Time To Failure</i>).....	31

IV.1.5 Biaya Material.....	31
IV.1.6 Data Upah Tenaga Kerja (<i>Gaji Maintenance Crew Existing</i>)....	33
IV.1.7 Data Harga Komponen Mesin.....	33
IV.2 Pengolahan Data.....	34
IV.2.1 Pengujian Distribusi TTR dan TTF.....	34
IV.2.2 Parameter Distribusi TTR dan TTF	37
IV.2.3 Penentuan Parameter Keandalan TTF dan TTR.....	39
IV.2.4 Fungsi Kepadatan Probabilitas dan Fungsi Laju Kerusakan.....	39
IV.2.5 Perhitungan <i>Life Cycle Cost</i> (LCC)	40
IV.2.6 Perhitungan <i>Overall Equipment Effectiveness</i> (OEE).....	56
IV.2.7 Perhitungan <i>Six Big Losses</i>	59
BAB V ANALISIS	67
V.1 Analisis Kebijakan <i>Maintenance</i>	67
V.2 Analisis Penentuan Distribusi <i>Time To Failure</i>	67
V.3 Analisis Karakteristik Kerusakan Mesin	67
V.4 Analisis <i>Life Cycle Cost</i> (LCC)	68
V.4.1 Analisis <i>Annual Operating Cost</i>	68
V.4.2 Analisis <i>Annual Maintenance Cost</i>	69
V.4.3 Analisis <i>Annual Shortage Cost</i>	71
V.4.4 Analisis <i>Annual Sustaining Cost</i>	72
V.4.5 Analisis <i>Annual Acquisition Cost</i>	74
V.4.6 Analisis Total Perhitungan <i>Life Cycle Cost</i>	75
V.4.7 Analisis Perhitungan Jumlah <i>Maintenance Crew Optimal</i>	76
V.4.8 Analisis Perhitungan Umur Mesin Optimal	76
V.4.9 Analisis Total Biaya Usulan dan Biaya Aktual.....	77
V.5 Analisis <i>Overall Equipment Effectiveness</i> (OEE)	77

V.5.1 Analisis <i>Availability</i>	79
V.5.2 Analisis <i>Performance Rate</i>	80
V.5.3 Analisis <i>Rate of Quality Product</i>	81
V.6 Analisis <i>Six Big Losses</i>	82
BAB VI KESIMPULAN	84
VI.1 Kesimpulan	84
VI.2 Saran	85
VI.2.1 Saran Bagi Perusahaan	85
VI.2.2 Saran Bagi Peneliti Selanjutnya	85
DAFTAR PUSTAKA	86
LAMPIRAN	