

## DAFTAR ISI

<b>ABSTRAK .....</b>	iii
<b>ABSTRACT .....</b>	iv
<b>KATA PENGANTAR.....</b>	v
<b>DAFTAR ISI.....</b>	vii
<b>DAFTAR GAMBAR.....</b>	x
<b>DAFTAR TABEL.....</b>	xi
<b>DAFTAR ISTILAH .....</b>	xii
<b>DAFTAR SINGKATAN DAN LAMBANG .....</b>	xiii
<b>DAFTAR LAMPIRAN .....</b>	xv
<b>BAB I PENDAHULUAN.....</b>	1
<b>I.1 Latar Belakang.....</b>	1
<b>I.2 Perumusan Masalah .....</b>	4
<b>I.3 Tujuan Penelitian.....</b>	4
<b>I.4 Manfaat Penelitian.....</b>	5
<b>I.5 Ruang Lingkup Penelitian .....</b>	5
<b>I.6 Sistematika Penulisan.....</b>	5
<b>BAB II LANDASAN TEORI .....</b>	7
<b>II.1 Manajemen Pemeliharaan.....</b>	7
<b>II.2 Jenis Pemeliharaan.....</b>	7
<b>II.3 Pola Kerusakan.....</b>	8
II.3.1 Distribusi Kerusakan.....	9
II.3.2 <i>Mean Time to Failure</i> .....	10
II.3.3 <i>Mean Time to Repair</i> .....	10
<b>II.4 Risk Matrix .....</b>	11
<b>II.5 Consequence dan Probability of Failure.....</b>	12
<b>II.6 Reliability Centered Maintenance .....</b>	13
II.5.1 Tujuan Reliability Centered Maintenance .....	13
II.5.2 Implementasi Reliability Centered Maintenance .....	13
<b>II.7 Failure Mode and Effect Analysis (FMEA).....</b>	14

<b>II.8 Radical Maintenance.....</b>	14
II.8.1 Root Cause Analysis.....	14
II.8.1.1 Failure Mode Effect and Criticality Analysis.....	15
II.8.1.2 Fault Tree Analysis.....	15
<b>II.9 Interval Waktu Maintenance.....</b>	17
II.9.1 Schedule On-Condition Task.....	17
II.9.2 Schedule Restoration Task dan Schedule Discard Task .....	17
<b>BAB III METODOLOGI PENELITIAN .....</b>	19
<b>III.1 Model Konseptual .....</b>	19
<b>III.2 Sistematika Pemecahan Masalah .....</b>	21
III.2.1 Tahap Pengumpulan Data.....	22
III.2.2 Tahap Pengolahan Data .....	23
III.2.3 Tahap Analisis .....	24
<b>BAB IV PENGUMPULAN DAN PENGOLAHAN DATA.....</b>	25
<b>IV.1 Pengumpulan Data.....</b>	25
IV.1.1 System Breakdown Structure .....	25
IV.1.2 Penentuan Komponen Kristis .....	26
IV.1.3 Data Time to Failure.....	28
IV.1.4 Data Time to Repair.....	28
IV.1.5 Data Harga Komponen .....	28
IV.1.6 Data Loss of Revenue.....	28
IV.1.7 Data Upah Operator.....	29
IV.1.8 Data Biaya Peralatan .....	30
<b>IV.2 Pengolahan Data .....</b>	30
IV.2.1 Penentuan Distribusi Data Time to Failure dan Time to Repair .....	30
IV.2.2 Parameter Distribusi Data Time to Failure dan Time to Repair.....	31
IV.2.3 Perhitungan Mean Time to Failure dan Mean Time to Repair.....	32
IV.2.4 Reliability Centered Maintenance dan Radical Maintenance .....	33
IV.2.4.1 Root Cause Analysis .....	33
IV.2.4.2.1 Failure Mode Effect and Criticality Analysis .....	33
IV.2.4.2.2 Fault Tree Analysis .....	34
IV.2.4.2 Logic Tree Analysis.....	38
IV.2.4.3 Task Selection .....	38

IV.2.4 Interval Waktu <i>Maintenance</i> .....	39
IV.2.5 Biaya <i>Maintenance</i> .....	40
<b>BAB V ANALISIS</b> .....	41
<b>V.1 Analisis Penentuan Komponen Kritis</b> .....	41
<b>V.2 Analisis Reliability Centered Maintenance dan Radical Maintenance</b> ..	42
V.2.1 Analisis <i>Maintenance Strategy Radical Maintenance</i> .....	42
V.2.2 Analisis <i>Manitenance Task</i> .....	44
<b>V.3 Analisis Biaya <i>Maintenance</i></b> .....	46
<b>BAB VI KESIMPULAN DAN SARAN</b> .....	48
<b>VI.1 Kesimpulan</b> .....	48
<b>VI.2 Saran</b> .....	49
VI.2.1 Saran Bagi Perusahaan .....	49
VI.2.2 Saran Bagi Penelitian Selanjutnya.....	49
<b>DAFTAR PUSTAKA</b> .....	50