

DAFTAR ISI

ABSTRAK	i
ABSTRACT	ii
KATA PENGANTAR	iii
DAFTAR ISI.....	vi
DAFTAR GAMBAR	x
DAFTAR TABEL.....	xi
DAFTAR LAMPIRAN.....	xiii
DAFTAR SINGKATAN DAN LAMBANG.....	xiv
DAFTAR ISTILAH	xv
BAB I PENDAHULUAN.....	1
I.1 Latar Belakang	1
I.2 Rumusan Masalah.....	5
I.3 Tujuan Penelitian	6
I.4 Batasan Penelitian.....	6
I.5 Manfaat Penelitian	6
I.6 Sistematika Penelitian.....	7
BAB II LANDASAN TEORI	8
II.1 Manajemen Perawatan.....	8
II.1.1 Perawatan Pencegahan (Preventive Maintenance)	8
II.1.2 Perawatan korektif (Corrective Maintenance).....	10
II.2 Reliability.....	10
II.2.1 Probability Density Function	10
II.2.2 Fungsi Keandalan (R(T))	10
II.2.3 Fungsi Laju Kerusakan	11

II.3	Mean Time Between Failure (MTBF)	11
II.4	Mean Time to Repair (MTTR)	12
II.5	Cost of Unreliability	13
II.6.1	Model Cost of Unreliability.....	13
II.6.2	Metodologi Penilaian COUR.....	15
II.6	Risk Based Maintenance.....	17
II.6.1	Perkiraan Risiko.....	17
II.6.2	Evaluasi Risiko	20
II.6.3	Perencanaan Maintenance.....	21
II.7	Risk Priority Number (RPN)	22
II.8	Fault Tree Analysis (FTA).....	23
II.9	Uji Anderson-Darling	23
II.10	Studi Literatur.....	23
II.10.1	Perbandingan dengan Penelitian Sebelumnya	23
BAB III METODOLOGI PENELITIAN.....		26
III.1	Model Konseptual.....	26
III.2	Sistematika Pemecahan Masalah	27
III.2.1	Tahap Pendahuluan.....	30
III.2.2	Tahap Pengumpulan Data	31
III.2.3	Tahap Pengolahan Data	31
III.2.4	Analisis	34
III.2.5	Kesimpulan dan Saran	34
BAB IV PENGUMPULAN DAN PENGOLAHAN DATA		35
IV.1	Pengumpulan Data	35
IV.1.1	Deskripsi Mesin Caulking	35
IV.1.2	Pemilihan Subsistem Kritis.....	36

IV.1.3	Data Time Between Failure	37
IV.1.4	Data Time to Repair.....	38
IV.1.5	Data Downtime	38
IV.1.6	Kegiatan Perawatan Mesin Caulking.....	38
IV.1.7	Data Upah Engineer.....	38
IV.1.8	Data Biaya Material	39
IV.1.9	Data Loss of Revenue	40
IV.1.10	Data Harga Komponen	41
IV.2	Pengolahan Data	41
IV.2.1	Penentuan Distribusi Yang Mewakili	41
IV.2.2	Plotting Distribusi	46
IV.2.3	Perhitungan Cost of Unreliability (COUR)	48
IV.2.4	Perhitungan Risk Based Maintenance (RBM).....	51
	BAB V ANALISIS	57
V.1	Analisis Hasil Penentuan Subsistem Kritis.....	57
V.2	Analisis Penentuan Distribusi Time Between Failure	57
V.3	Analisis Penentuan Distribusi Time To Repair	58
V.4	Analisis Penentuan Distribusi Downtime	58
V.5	Analisis Perhitungan Cost of Unreliability (COUR)	58
V.5.1	Analisis Failure Rate.....	58
V.5.2	Analisis Time Lost.....	59
V.5.3	Analisis Money Lost.....	62
V.6	Analisis Konsekuensi dan Risiko Berdasarkan Risk Based Maintenance	64
V.6.1	Analisis Skenario Kerusakan dan Konsekuensi.....	64
V.6.2	Analisis Risiko.....	64

BAB VI KESIMPULAN DAN SARAN	65
VI.1 Kesimpulan	65
VI.2 Saran	65
VI.2.1 Saran Bagi Perusahaan.....	65
VI.2.2 Saran Bagi Peneliti Selanjutnya.....	66
DAFTAR PUSTAKA	67