

DAFTAR ISI

ABSTRAK	i
<i>ABSTRACT</i>	ii
KATA PENGANTAR	iii
LEMBAR PERSEMBAHAN	iv
DAFTAR ISI.....	v
DAFTAR GAMBAR	ix
DAFTAR TABEL.....	x
DAFTAR LAMPIRAN.....	xi
DAFTAR SINGKATAN	xii
DAFTAR LAMBANG	xiii
DAFTAR ISTILAH	xiv
BAB I PENDAHULUAN.....	1
I.1. Latar Belakang	1
I.2. Perumusan Masalah.....	3
I.3. Tujuan Penelitian.....	3
I.4. Manfaat Penelitian.....	3
I.5. Ruang Lingkup: batasan dan asumsi	3
I.6. Sistematika Penulisan	4
BAB II TINJAUAN PUSTAKA.....	6
II.1. Kajian Pustaka	6
II.1.1. Pengertian <i>Maintenance</i>	6
II.1.2. Tujuan <i>Maintenance</i>	6
II.1.3. Jenis-jenis <i>Maintenance</i>	7
II.1.4. <i>Preventive Maintenance</i>	8

II.1.5.	<i>Corrective Maintenance</i>	9
II.1.6.	Pola Kerusakan (<i>Failure Pattern</i>).....	10
II.1.7.	Distribusi Kerusakan.....	11
II.1.8.	<i>Mean Time To Failure</i> (MTTF).....	11
II.1.9.	<i>Mean Time To Repair</i> (MTTR).....	12
II.1.10.	<i>Risk Matrix</i>	12
II.1.11.	<i>Risk Based Maintenance</i>	16
II.1.11.1.	Perkiraan Risiko (<i>risk estimation</i>)	18
II.1.11.2.	Evaluasi Risiko (<i>risk evaluation</i>).....	19
II.1.11.3.	Perencanaan pemeliharaan (<i>maintenance planning</i>)	19
II.1.12.	Interval Waktu Perawatan	19
II.1.13.	<i>Related Paper</i>	19
II.1.12.1.	<i>Paper 1</i>	20
II.1.12.2.	<i>Paper 2</i>	20
II.1.12.3.	<i>Paper 3</i>	21
II.1.12.4.	<i>Paper 4</i>	21
II.1.12.5.	<i>Paper 5</i>	22
II.1.12.6.	<i>Paper 6</i>	23
II.1.12.7.	<i>Paper 7</i>	23
II.1.12.8.	<i>Paper 8</i>	24
II.1.12.9.	<i>Paper 9</i>	24
II.1.12.10.	<i>Paper 10</i>	25
II.2.	Alasan Pemilihan Metode	26
II.3.	Posisi Penelitian	27
BAB III METODOLOGI PENELITIAN.....		30
III.2.1	Struktur Masalah (Model Konseptual)	30

III.2.2	Sistematika Penyelesaian Masalah	32
BAB IV PENGUMPULAN DAN PENGOLAHAN DATA		36
IV.1.	Pengumpulan Data	36
IV.1.1.	Deskripsi Mesin Bubut.....	36
IV.1.2.	Kegiatan Perawatan Mesin Bubut.....	37
IV.1.3.	Penentuan Komponen Kritis	37
IV.1.4.	Data TTF (<i>Time To Failure</i>)	38
IV.1.5.	Data TTR (<i>Time To Repair</i>).....	38
IV.1.6.	Data <i>Loss of Revenue</i>	38
IV.1.7.	Data Upah <i>Engineer</i>	39
IV.1.8.	Data Biaya Material	40
IV.1.8.1.	Data Biaya Penggunaan Peralatan	40
IV.1.8.2.	Data Biaya Bahan Habis Pakai	41
IV.1.9.	Data Harga Komponen.....	41
IV.2.	Pengolahan Data	41
IV.2.1.	Penentuan Distribusi Komponen Kritis	42
IV.2.1.1.	Penentuan Distribusi <i>Time to Failure</i> (TTF)	42
IV.2.1.2.	Penentuan Distribusi <i>Time to Repair</i> (TTR).....	44
IV.2.2.	Penentuan Parameter Distribusi Komponen Kritis	46
IV.2.2.1.	Penentuan Parameter <i>Time to Failure</i> (TTF).....	46
IV.2.2.2.	Penentuan Parameter <i>Time to Repair</i> (TTR)	46
IV.2.3.	Perhitungan MTTF dan MTTR.....	47
IV.2.3.1.	Perhitungan <i>Mean Time to Failure</i> (MTTF).....	47
IV.2.3.2.	Perhitungan <i>Mean Time to Repair</i> (MTTR)	47
IV.2.4.	<i>Risk Based Maintenance</i> (RBM).....	48
IV.2.4.1.	<i>Consequence Assessment</i>	48

IV.2.4.2. <i>Risk Estimation</i>	50
IV.2.4.3. <i>Risk Evaluation</i>	52
IV.2.4.4. Perhitungan Interval Waktu <i>Preventive Maintenance</i>	53
BAB V ANALISIS DATA	54
V.1. Analisis Pemilihan Komponen Kritis	54
V.2. Analisis Penentuan Distribusi TTF	55
V.3. Analisis Hasil Pengukuran Kualitatif dan Kuantitatif Menggunakan Metode <i>Risk Based Maintenance</i> (RBM).....	55
V.4. Analisis Penentuan Kriteria Penerimaan Risiko	56
V.5. Analisis Interval Waktu <i>Preventive Maintenance</i>	57
BAB VI KESIMPULAN DAN SARAN	58
VI.1. Kesimpulan	58
VI.2. Saran	59
DAFTAR PUSTAKA	60