

DAFTAR ISI

| | |
|---|------|
| ABSTRAK | i |
| ABSTRACT | ii |
| KATA PENGANTAR | iii |
| DAFTAR SINGKATAN..... | v |
| DAFTAR LAMBANG..... | vi |
| DAFTAR ISI | vii |
| DAFTAR TABEL..... | ix |
| DAFTAR GAMBAR | xi |
| DAFTAR LAMPIRAN | xii |
| DAFTAR ISTILAH | xiii |
| BAB I PENDAHULUAN | 1 |
| I.1 Latar Belakang..... | 1 |
| I.2 Perumusan Masalah | 6 |
| I.3 Tujuan..... | 6 |
| I.4 Manfaat..... | 6 |
| I.5 Batasan Masalah | 7 |
| I.6 Sistematika Penulisan..... | 7 |
| BAB II TINJAUAN PUSTAKA | 9 |
| II.1 Manajemen Perawatan | 9 |
| II.2 Pola Kerusakan (<i>Failure Pattern</i>)..... | 11 |
| II.3 <i>Reliability</i> | 12 |
| II.4 Mean Time to Failure (MTBF)..... | 14 |
| II.5 Mean <i>Time to Repair</i> (MTTR)..... | 16 |
| II.6 Risk Priority Number | 16 |
| II.7 <i>Reliability Centered Maintenance</i> | 20 |

| | |
|---|----|
| II.8 Model Minimasi Biaya perawatan | 24 |
| II.9 Proses Penentuan Keputusan dengan RCM..... | 25 |
| II.10 <i>Risk Based Maintenance</i> | 27 |
| II.11 Studi Literatur | 32 |
| BAB III METODOLOGI PENELITIAN..... | 35 |
| III.1 Model Konseptual | 35 |
| III.2 Sistematika Pemecahan Masalah | 37 |
| BAB IV PENGUMPULAN DAN PENGOLAHAN DATA | 45 |
| IV.1 Pengumpulan Data | 45 |
| IV.1.1 Deskripsi Mesin Mori Seiki NH4000 DCG | 45 |
| IV.2 Data Pengukuran Kuantitatif | 50 |
| IV.3 Perhitungan RBM | 60 |
| IV.4 Pengukuran Kualitatif RCM..... | 66 |
| BAB V ANALISIS | 77 |
| V.1 Analisis Penentuan Sistem dan Subsystem kritis..... | 77 |
| V.2 Analisis Penentuan Distribusi <i>Time Between Failure</i> | 77 |
| V.3 Analisis Penentuan Distribusi <i>Time to Repair</i> dan <i>downtime</i> | 78 |
| V.5 Estimasi Konsekuensi dan Risiko Kerusakan Berdasarkan RBM..... | 78 |
| V.6 Analisis Penentuan Kriteria Penerimaan Risiko | 82 |
| V.7 Analisis <i>Reliability-Centered Maintenance</i> | 82 |
| V.8 Analisis Interval Waktu perawatan | 83 |
| V.9 Analisis Biaya perawatan | 85 |
| BAB VI KESIMPULAN DAN SARAN | 86 |
| VI.1 Kesimpulan..... | 86 |
| VI.2 Saran..... | 90 |
| DAFTAR PUSTAKA | 91 |