

ANALISIS PERAWATAN DAN TROUBLESHOOTING WASH PRESS WENRUI DALAM UPAYA MEMINIMALKAN DOWNTIME FIBERLINE 9 PT.INDAH KIAT PULP & PAPER TBK PERAWANG

Nama Mahasiswa : Hengky Firwanda
Nim : 2204211367
Dosen Pembimbing : Bambang Dwi Haripriadi, S.T., M.T

ABSTRAK

Metode yang digunakan dalam penelitian ini adalah Condition-Based Monitoring (CBM) dengan pengukuran tiga parameter utama yaitu vibrasi, temperatur, dan noise, menggunakan alat SKF Quick Collect. Selain itu, digunakan metode Root Cause Analysis (RCA) untuk mengidentifikasi akar penyebab kerusakan. Hasil pengujian menunjukkan adanya anomali pada Gearbox Screw Pre Breaker, ditandai dengan nilai vibrasi dan noise yang melebihi ambang batas aman, serta temperatur yang tinggi pada bearing Scraw Prebreaker Drive Side. Hal ini mengindikasikan adanya masalah pelumasan, keausan bearing, serta potensi ketidakseimbangan sistem rotating. Berdasarkan hasil analisis, direkomendasikan strategi perawatan preventif secara berkala dengan pemantauan kondisi real-time, pengecekan pelumasan, perbaikan alignment, serta inspeksi rutin komponen internal gearbox. Penerapan perawatan berbasis kondisi ini terbukti efektif dalam mendeteksi dini potensi kerusakan dan meminimalkan downtime mesin secara signifikan.

Kata Kunci: Wash Press Wenrui, Downtime, Condition-Based Monitoring (CBM), SKF Quick Collect, Root Cause Analysis (RCA), Preventive Maintenance

ANALYSIS OF MAINTENANCE AND TROUBLESHOOTING WASH PRESS WENRUI IN AN EFFORT TO MINIMIZE DOWNTIME OF FIBERLINE 9 PT.INDAH KIAT PULP & PAPER TBK PERAWANG

Nama Mahasiswa : Hengky Firwanda
Nim : 2204211367
Dosen Pembimbing : Bambang Dwi Haripriadi, S.T., M.T

ABSTRACT

The method used in this research is Condition-Based Monitoring (CBM) by measuring three main parameters: vibration, temperature, and noise, using the SKF Quick Collect device. Additionally, the Root Cause Analysis (RCA) method is applied to identify the root causes of failure. The test results indicated anomalies in the Gearbox Screw Pre Breaker, marked by vibration and noise values exceeding safe thresholds, along with elevated temperature at the Scraw Prebreaker Drive Side bearing. These findings indicate issues related to lubrication failure, bearing wear, and potential imbalance in the rotating system. Based on the analysis results, it is recommended to implement a scheduled preventive maintenance strategy with real-time condition monitoring, lubrication checks, alignment corrections, and routine inspections of internal gearbox components. The application of this condition-based maintenance approach has proven effective in detecting early signs of potential failure and significantly minimizing machine downtime.

Keywords: *Wash Press Wenrui, Downtime, Condition-Based Monitoring (CBM), SKF Quick Collect, Root Cause Analysis (RCA), Preventive Maintenance*