ABSTRAK

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Judul Laporan Akhir	:	*Rekondisi Mesin Bending Plat Segman Blade Tipe Badak Nomor Mesin 0084-2001 Di Bengkel Produksi Jurusan Teknik Mesin Politeknik Negeri Sriwijaya*

(2025: xii + 70 halaman + 9 gambar+ 5 Tabel + 6 lampiran)

Laporan akhir ini membahas proses rekondisi mesin bending plat segmen blade tipe Badak nomor mesin 0084-2001 yang berada di Bengkel Produksi Jurusan Teknik Mesin Politeknik Negeri Sriwijaya. Mesin ini sebelumnya mengalami kerusakan seperti hilangnya handle dan stoper, kerusakan pada shaft dan sudut lekukan, serta korosi pada rangka. Tujuan rekondisi adalah mengembalikan fungsi mesin agar dapat digunakan kembali dalam kegiatan praktikum mahasiswa. Metode yang digunakan mencakup observasi, konsultasi teknis, identifikasi kerusakan, pengujian fungsi, serta perbaikan melalui penggantian komponen, pembersihan, dan pengecatan ulang. Laporan ini juga menyoroti pentingnya perawatan mesin secara berkala, baik preventive maupun corrective maintenance, guna menjaga kinerja mesin tetap optimal. Hasil rekondisi menunjukkan bahwa performa mesin meningkat, umur pakai bertambah, serta efisiensi dan akurasi kerja menjadi lebih baik. Selain manfaat teknis, kegiatan ini memberikan nilai edukatif bagi mahasiswa melalui pengalaman langsung dalam proses perbaikan dan perawatan mesin industri. Rekondisi ini tidak hanya memulihkan fungsi alat secara teknis, tetapi juga mendukung pembelajaran aplikatif. Kesimpulannya, rekondisi mesin mampu memperpanjang masa guna alat, meningkatkan produktivitas, dan menekan biaya operasional. Dengan perawatan yang rutin dan terjadwal, potensi kerusakan dapat dikurangi secara signifikan.

Kata kunci: rekondisi mesin, bending plat manual, preventive maintenance, perawatan mesin, pendidikan vokasi

ABSTRACT

Reconditioning Of The Segment Blade Plate *Bending* Machine Type Badak Machine Number 0084-2001 At The Production Workshop Of Themechanical Engineering Department Of Sriwijaya State Polytechnic.
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This final report discusses the reconditioning process of the segment blade-type Badak manual plate bending machine, serial number 0084-2001, located in the Production Workshop of the Mechanical Engineering Department at Politeknik Negeri Sriwijaya. The machine previously experienced damage, such as missing handles and stoppers, shaft and bending angle issues, as well as corrosion on the machine frame. The purpose of the reconditioning was to restore the machine's functionality so it could be used again in student practicum activities. The methods used included observation, technical consultation, damage identification, functional testing, and repairs through component replacement, cleaning, and repainting. This report also emphasizes the importance of regular machine maintenance, both preventive and corrective, to ensure optimal performance. The results of the reconditioning showed improved machine performance, extended service life, and better work efficiency and accuracy. In addition to technical benefits, the activity provided educational value to students by offering hands-on experience in industrial machine repair and maintenance. This reconditioning not only restored the machine's technical functionality but also supported practical learning. In conclusion, machine reconditioning can extend equipment lifespan, improve productivity, and reduce operational costs. With scheduled and routine maintenance, the risk of damage can be significantly minimized.

Keywords: machine reconditioning, manual plate bending, preventive maintenance, machine maintenance, vocational education.