

## **ABSTRAK**

### **REKOMENDASI PENERAPAN *TOTAL PRODUCTIVE MAINTENANCE* PADA MESIN PRODUKSI DENGAN PENGUKURAN *OVERALL RESOURCE EFFECTIVENESS* (STUDI KASUS : BENGKEL BUBUT NAGA BIRU)**

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Mesin perlu dijaga kondisinya agar terhindar dari kerusakan sehingga, perlu dilakukan kegiatan perawatan atau *maintenance* untuk menghindari kerusakan akibat pemakaian mesin atau peralatan. Bengkel Bubut Naga Biru merupakan bengkel otomotif yang memperbaiki komponen otomotif dengan empat mesin produksi yaitu Mesin Bubut, Mesin Korter, Mesin *Frais* dan Mesin Bor Duduk. Berdasarkan hasil pengamatan, kegiatan perawatan pada mesin produksi dilakukan secara *Corrective Maintenance* serta tidak tercapainya target dalam sehari-hari untuk proses perbaikan. Penelitian ini bertujuan untuk mengetahui hasil kinerja mesin produksi dan mengetahui jenis faktor *losses* menggunakan pendekatan TPM dengan pengukuran ORE serta *Six Big Losses*. Berdasarkan hasil penelitian, nilai ORE pada mesin produksi masih belum baik. Pada mesin bubut bernilai 34,18%, mesin korter bernilai 15,73%, mesin *frais* bernilai 9,04% dan mesin bor duduk bernilai 4,02%. Hasil perhitungan *Six Big Losses* yang memiliki *losses* terbesar yaitu pada *set up and adjusment losses* untuk mesin bubut *losses* bernilai 3,09%, mesin korter bernilai 2,30%, mesin *frais* bernilai 0,98% dan mesin bor duduk bernilai 1,17%. Rekomendasi yang diberikan yaitu penerapan 5S, pilar TPM seperti *autonomous maintenance, education & traning*, membuat *daily checklist* serta melakukan kerja sama dengan perusahaan terkait agar produktivitas perusahaan tercapai.

**Kata Kunci :** *Overall Resource Effectiveness* (ORE), *Six Big Losses*, *Total Productive Maintenance* (TPM)

## **ABSTRACT**

***RECOMMENDATION FOR IMPLEMENTING TOTAL PRODUCTIVE  
MAINTENANCE ON PRODUCTION MACHINES WITH OVERALL  
RESOURCE EFFECTIVENESS MEASUREMENTS (CASE STUDY :  
BENGKEL BUBUT NAGA BIRU)***

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Machines need to be maintained in order to avoid damage so that, it is necessary to carry out maintenance activities or maintenance to avoid damage due to the use of machinery or equipment. Naga Biru Lathe Workshop is an automotive workshop that repairs automotive components with four production machines, Lathes Machines, Corte Machines, Milling Machines and Sitting Drilling Machines. Based on observations, maintenance activities on production machines are carried out in Corrective Maintenance and the daily targets for the repair process are not achieved. This study aims to determine the results of production machine performance and determine the types of losses factors using the TPM approach with ORE and Six Big Losses measurements. Based on the research results, the ORE value on the production machine is still not good. On the lathe is worth 16.83%, the corte machine is worth 4.50%, the milling machine is worth 1.17% and the sitting drilling machine is worth 0.29%. The results of the calculation of the Six Big Losses that have the biggest losses are in set up and adjustment losses for lathe losses worth 3,09%, corte machine worth 2,30%, milling machine worth 0,98% and sitting drilling machine worth 1,17%. The recommendations given are the application of 5S, TPM pillars such as autonomous maintenance, education & training, making daily checklists and collaborating with related companies so that company productivity is achieved.

**Keywords :** *Overall Resource Effectiveness (ORE), Six Big Losses, Total Productive Maintenance (TPM)*