ANALISIS POSTUR KERJA DENGAN METODE *WORKPLACE ERGONOMIC RISK ASSESMENT* (WERA) PADA OPERATOR MESIN BUBUT MANUAL PADA PT YOGYA PRESISI TEHNIKATAMA INDUSTRI

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ABSTRAK

PT Yogya Presisi Tehnikatama Industri merupakan perusahaan yang bergerak dalam bidang manufaktur seperti membuat *mould* (cetakan), *spare part* mesin industri, otomotif serta *plastic injection.* Permasalahan yang terjadi diperusahaan ini adalah adanya aktivitas pada operator mesin bubut yang berpotensi menimbulkan kelelahan dan keluhan sakit seperti *Musculoskeletal Disorders* pada pekerja, hasil pengisian Kuesioner NBM didapatkan adanya keluhan pada bagian nya punggung dengan persentase 56,25%, lengan bawah kanan sebesar 62,5%, paha kiri sebesar 56,25%, lutut kiri 50%, paha kanan 50%, betis kanan 68,78%, pergelangan kaki kanan 87,5%, dan kaki kanan 87,5%. Sehingga perusahaan perlu melakukan analisis terkait postur dari pekerja. Salah satu teknik atau metode yang dapat menganalisis postur kerja adalah metode WERA (*workplace ergonomic risk assessment*). Adapun berdasarkan analisis Usulan perbaikan yang diberikan yaitu pada bahu membentuk posisi moderat kurang dari 60^o dengan lebih banyak jeda, pada pergelangan tangan membentuk sudut kurang dari 50° dengan pengulangan sebesar 0 sampai 10 kali permenit, pada leher dengan posisi 10°- 20° dengan gerakan diperbanyak jedanya. Pada punggung operator dengan posisi 0°-20°dengan pengulangan sebanyak 4-8 kali permenit, pada faktor kaki berada diposisi normal tegak, dengan durasi kurang dari 4 jam, pada faktor *contact stress* usulan yang diberikan adalah memperbaiki postur pada pergelangan tangan pekerja yang tadi nya lebih dari 50^o maka sebaiknya postur pergelangan tangan kurang dari 50^o . sedangkan Dari hasil pengolahan data didapatkan perbandingan Nilai skor akhir postur kerja yang didapatkan pada postur sebelum usulan adalah sebesar 39 pada aktivitas *facing,* dan sebesar 38 Pada aktivitas memasang mata bor dan *drilling* termasuk kedalam kategori ***MEDIUM***. Sedangkan nilai skor WERA sesudah usulan adalah sebesar 26 termasuk kedalam kategori ***LOW***.

Kata Kunci : NBM, WERA, Postur Kerja, MSD

WORKING POSTURE ANALYSIS WITH ERGONOMIC RISK ASSESSMENT (WERA) WORKPLACE METHOD ON MANUAL LATHE OPERATOR AT PT YOGYA PRESISI TEHNIKATAMA INDUSTRI

ABSTRACT

PT Yogya Presisi Tehnikatama Industri is a company engaged in manufacturing, such as making molds, industrial spare parts, automotive and plastic injection. The problem in this company is that there is activity on the lathe operator that can cause fatigue and pain complaints such as Musculoskeletal Disorders in workers. The results of filling out the NBM Questionnaire found that there were complaints on the back with a percentage of 56.25%, right forearm 62.5 %, 56.25% left thigh, 50% left knee, 50% right thigh, 68.78% right calf, 87.5% right ankle, and 87.5% right foot. So the company needs to do an analysis related to the workers' posture. One technique or method that can analyze work posture is the WERA (workplace ergonomic risk assessment) method. Based on the analysis, the improvement proposals given are that the shoulder forms a moderate position of less than 60^{o} with more pauses, the wrist forms an angle of less than 50° with repetitions of 0 to 10 times per minute, on the neck with a position of 10°-20° with movement increased pause. On the operator's back with a position of 0°-20° with 4-8 repetitions per minute, on the leg factor in a normal upright position, with a duration of fewer than 4 hours, on the contact stress factor, the proposal given is to improve the posture on the worker's wrist earlier. If it's more than 50^{o}, it's best if the wrist posture is more minor than 50o. Meanwhile, from the data processing results, a comparison of the final working posture scores obtained before the proposal was 39 for facing activities and 38 for drilling and drilling activities included in the MEDIUM category. While the WERA score after the proposal is 26, it is included in the LOW category.

Keywords: NBM, WERA, Work Posture, MSD

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