ABSTRAK

Penelitian kali ini bertujuan untuk menganalisis beban kerja yang dialami serta mengidentifikasi penyebab beban kerja berlebih yang dirasakan operatori di PT X. PT X merupakan sebuah perusahaan yang bergerak di sector industry yang memproduksi berbagai macam jenis roller.Subjek penelitian kali ini adalah 16 operator produksi di PT X. Beban kerja yang diukur adalah beban kerja fisik dan mental yang diolah dengan menggunakan metode Cardiovascular Load(CVL), Metode NASA – Task Load Index (NASA TLX), Metode Workload Analysis(WLA). Manfaat dari penelitian kali ini adalah untuk mengetahui seberapa besar tingkatan beban kerja baik fisik dan mental yang dialami oleh PT X serta mengetahui apakah jumlah pekerja sudah sesuai dengan standard optimal beban kerja operator. Berdasarkan hasil analisis Metode NASA- Task Load Index (NASA TLX) terdapat 9 operator yang mengalami beban kerja mental berat dimana operator yang menerima beban mental terberat adalah operator las titik dengan indeks WWL sebesar 80. Berdasarkan hasil analisis metode Cardiovascular Load (CVL) terdapat 2 operator yang mengalami beban kerja fisik berlebih dengan beban kerja fisik terberat dialami oleh operator las titik dengan persentase Cardiovascular load sebesar 43.5 %.Berdasarkan Hasil analisis dengan metode Workload Analysis didapati bahwa divisi welding di PT X mengalami beban kerja berlebih dengan besaran WLA sebesar 108 % . Usulan perbaikan yang diberikan berupa penambahan tenaga kerja divisi pengelasan,penempatan job description berdasarkan factor usia, penambahan alat bantu suhu ruangan, pemberian music, pengembangan departemen konseling, pemberian pelatihan serta menerapkan kebijakan rekreasi

Kata kunci: Beban Kerja Fisik, Beban Kerja Mental, Cardiovascular Load, Nasa – TLX, *Workload Analysis*

ABSTRACT

This study aims to analyze the workload experienced and identify the causes of excessive work felt by operators at PT X. PT X is a company engaged in the industrial sector that produces various types of rollers. The subjects of this research are 16 production operators at PT X. The measured workload is the physical and mental workload which is processed using the Cardiovascular Load (CVL) method, the NASA – Task Load Index (NASA TLX) method, and the Workload Analysis (WLA) method. The benefits of this research are to find out how much work level both physically and mentally experienced by PT X and to find out whether the number of workers is in accordance with the optimal operator workload standards. Based on the analysis of the NASA-Task Load Index (NASA TLX) method, there were 9 operators who experienced mental workload where the operator who received the mental burden was a spot welding operator with a WWL index of 80. Based on the results of the Cardiovascular Load (CVL) analysis method, there were 2 operators who experienced excessive physical workload The heaviest physical work experience experienced by the operator at the point with the proportion of Cardiovascular load of 43.5%. Based on the results of the analysis using the Workload Analysis method, it was found that the welding division at PT X experienced an excessive workload with a WLA amount of 108%. Proposed improvements provided in the form of the addition of welding division workforce, placement of job description based on age factor, addition of room temperature aids, music provision, development of counseling departments, providing training and implementing recreational policies

Keywords**: **Physical workload, Mental workload, Cardiovascular Load, Nasa – TLX, Workload Analysis.