ABSTRACT

Redesigning the Ergonomic Work Attitude of the Turning by method Rapid entire Body Assessment

(Case Study : Metal Craftsman Opposite the Ulu II Plaju)

metal craftsman is a medium-sized small business engaged in the manufacture, assembly and repair of metal-based materials. The process carried out is still using manual processes with humans as machine operation. Especially the turning process, the ash vessel in the lathe must meet the standard criteria. Based on the results of observations, the turning section found an unnatural position of 80% or it could be called non-ergonomic when operating a lathe. Then improvements are needed to reduce these complaints.

Rapid Entire Body Assessment (REBA) is a method developed in the field of ergonomics and can be used quickly to assess the work attitude or posture of the operator's neck, back, arms and legs. Before being assessed using the REBA method, researchers conducted interviews with operators to be able to streamline the level of complaints of Musculoskeletal Disorder (MSDs) experienced using the Nordic Body Map body image questionnaire. The workload felt on the operator can be categorized as medium and large with a pulse rate of 117.58 beats / minute and 129.49 beats / minute.

After redesigning the operator's work attitude with the REBA method, a significant reduction in complaints was obtained by 30%. And the pulse gets a decrease in lightness (97.42 beats / minute) and moderate (105.45 beats / minute). The results of the test showed that there was a difference between before and after the redesign of the turning position.

Keywords: Ergonomics, Rapid Entire Body Assessment (REBA), Musculoskeletal Disorder Complaints (MSDs).