

ABSTRACT

Pindad PT (Persero) is a company engaged in the production of weapons and combat vehicles . Production components of the Panzer Anoa 6x6 combat vehicle called body hull assembly done by the department of special vehicle production . One of the components of the production process is the body hull assembly process by the end of the cutting work station afbramen with working hours for 6 hours per day .

Based on direct observations seen that there is awkward posture afbramen operator work station at work . Operator's neck is bending more than 20° and his trunk bends between 20-60°. Washington State Department of Labor and Industries (WISHA) states that working with the position of the neck or back bent at an angle of more than 30° without support for more than a total of 2 hours a day as an awkward posture (www.lni.wa.gov , 2013). Awkward postures can lead to occupational hazards such as traumatic damage called Musculoskeletal Disorders (MSDs)occurs in the spine and muscular system .

Posture of the work station afbramen's operator in the existing condition is feared will lead to MSDs disorder that can interfere with the health and productivity of the work station afbramen's operator. Seeing the work posture, work posture assessment is carried out using Rapid Upper Limb Assessment (RULA). RULA analyzed the upper body by the body's bending angle from the neutral position . Outcomes assessment of RULA for working posture of the afbramen's operator is 7 and 6 which means it is needed to do the research and improvement of work postures quickly.

There is a hypothesis that the working posture is bent and bowed because the height of work table and chair are too low for the operator. Therefore, to overcome the awkward work postures proposed improvement will be done by designing technical specifications dimension of workbench and chair. The dimension design of work table and chair are analyzed using simulation with RULA method . With the proposed chair and work table, operator's work posture become better with RULA final score of 1 for the left body and 3 for the right body side, which means the conditions are acceptable and do not need to be repaired immediately .

Keyword : ergonomic, working posture, awkward posture, Rapid Upper Limb Assessment, RULA, MSDs.