

ABSTRACT

PT. Karya Kita is company focused on printing, located on Soekarno-Hatta Bandung. PT. Karya Kita's book printing has 6 workstation on production line. For packaging workstation there are 5 operator in the workstation where the activity is still done manually involving bending operator to enter books into cardboard. So that it poses a risk to the packaging activity book, it can be seen by RULA method.

Methods Rapid Upper Limb Assessment (RULA) is a rapid method of upper body posture assessment. This input method is the posture (the palm of the hand, upper arm, forearm, back, and neck), the load is lifted, the energy used (static / dynamic), and the number of jobs. So that increasing risk on book packaging, this matter can be see on RULA score point 7 for lifting book, moving book and enter book into cardboard. This activity can pose a MSDs risk that feel by packaging operator. Scores rula worth 7 means that the condition is harmless, the inspection and the necessary changes immediately (at that moment). The third activity that is in the packaging process can pose a risk of MSDs is felt by the operator. Musculoskeletal Disorders (MSDs) is a disorder of the muscles, nerves, tendons, ligaments, joints, cartilage and spinal discs.

Based on this problems, author designing tool to help decreasing MSDs risk on book packaging using Framework Mechanical Design and Tools adopted from Ulrich-Eppinger. The result from Framework Mechanical Design is specification from designed tool. The tools design consider from operator posture to help decreasing MSDs risk that feel by operator.

Keyword : *Framework Mechanical Design, Spesifikasi Teknis, Ulrich-Eppinger, RULA, Rapid Upper Limb Assessment*