

ABSTRACT

Bank Sampah Hijau Lestari is a central plastic waste processing facility in the city of Bandung. There are several stages in waste management in this garbage bank, ranging from sorting, crushing, washing and transferring into sacks, drying. However, in the process of washing and transferring pieces of plastic is still done manually. After RULA, REBA, and RWL analysis, very high scores are obtained which can lead to the risk of Musculoskeletal Disorders (MSDs) so that there is a need to improve posture through the proposal aids. The design of this proposed aid uses the Ergonomic Function Deployment (EFD) method that applies the ergonomic aspects of EASNE (Efektif, Aman, Sehat, Nyaman, dan Efisien) so as to improve the operator's posture to reduce the risk of MSDs injuries. Based on the research, it was found that the specifications of the selected auxiliary tool that can move pieces of plastic using a screw conveyor, the tool can be adjusted in height, has wheel lock, so that the RULA score is 3, the REBA score is 4, the RWL value is 23 kg, and the LI is 0.28 so that this value can reduce the risk of MSDs injury to the operator when carrying out the process of transferring pieces of plastic.

Keywords : RULA, REBA, RWL, LI, *Musculoskeletal Disorders, EASNE, Ergonomic Function Deployment*