

ABSTRACT

In the sorting process in PTPN VIII Ciater, there are three sorting paths: line 1, line 2, and line 3. Material handling used to move materials that need to be processed on other lines or other machines using bolotong (a Plastic container with a capacity of 30 kg) in which the bolotong must be withdrawn by the operator to be transferred to the destination machine. In the process, the operator must bend to pull the material amount of 30 kg without the aid of wheel. From the calculation analysis of the value of Rapid Upper Limb Assessment obtained value 7 which indicates that immediate changes are needed. The method of removal of the material should be repaired using a conveyance tool so that the tea powder can be moved with a better work posture. The design of this toolkit is structured using a rational product design process by Nigel Cross. From the research, the design of the material transfer equipment that can facilitate the process of moving material with the specification of container diameter of 50 cm, height 40 cm with a tool shift handle U-Shape and output funnel in the form of flat chute.

Keywords: *Material handling Equipment, Rational Product Design, Nigel Cross.*