

## **ABSTRACT**

*PT XYZ is one of the beauty care company that has several sections on its production floor, namely cream, powder and liquid. The finding discussed in this study is the use of liquid containers in liquid processing. In this process, a liquid container is used to store bulk that has been processed to be moved from Work in Process (WIP) room to product packaging room. Based on this activity, the risk of MSDs exposure was analyzed using REBA and WSC ergonomic approaches. When an operator push liquid containers with their bare hands, a REBA value of 9 is obtained, which indicates a high risk and it requires change, and WSC assessment indicates a moderate risk in the overall work environment. Meanwhile, if the operator uses material handling provided by the company, the REBA value is 11 which indicates very high risk and immediate changes are needed, and the WSC assessment indicates a high risk in the overall work environment. Therefore, a material handling with more attention to the impact of MSDs and operators able to transport liquid containers easier is needed. In this study, new material handling is designed using the kansei engineering method. This study identified seven kansei words which design result has REBA value of 2 point on the activity of pushing pedal, 3 poin on pushing material handling activity, and 6 poin on walking while pushing material handling activity, along with WSC score that low risk on overall work environment.*

*Keywords: material handling, liquid container, kansei, ergonomic, MSDs, REBA, WSC*