

ABSTRACT

CV. Indrajaya is an industrial factory which operates in the footwear industry and is a producer of footwear which will be distributed to various markets. CV. Indrajaya industrial factory which works within 8 working hours for 6 days. When conducting observations in the design and sample division, there were operators who worked without using tools, namely chairs and tables, with a single sitting time of approximately four hours and carried out the process of making sandals alone using calculations using the Operation Process Chart tool. This makes operators potentially susceptible to MSD problems due to unergonomic working positions. Then an operator identification analysis was carried out through assessment tools using the Nordic Body Map (NBM) questionnaire tool, the SNI 9011:2021 questionnaire and RULA which got scores of 58, 10 and 6, which means that it is at a dangerous risk level and requires immediate treatment. Therefore, this research will design a workbench using the Kano method and the Quality function deployment (QFD) method which can help the sandal making process to obtain the needs and desires of tools for making sample products. This research produces a proposed design tool in the form of a work table that has features and shelves according to operator needs. The size of the work table has been adjusted to the anthropometric data of the operator's body to reduce the potential for Musculoskeletal Disorders. Based on the results of the workbench design, a RULA score of 2 was obtained using the help of jack software. Based on this design, it was stated that the design was successful because it could reduce the potential risk score for MSDs in the design and sample division operators at CV. Indrajaya, Bogor Regency.

Keyword : *MSDs, Kano, Quality function deployment, House Of Quality, Software Jack*