

ABSTRACT

Indonesia is the largest country in the world in tempe production and is the largest soybean market in Asia. As much as 50% of Indonesia's soybean consumption is used to produce tempeh, 40% is used to produce tofu, and the remaining 10% is used in other products (such as tauco, soy sauce, etc.). Around Babakan Tarogong, Bandung City, West Java, there is a tempeh industry that still uses traditional methods in its production process. During printing and packaging, there are complaints of pain or discomfort in parts of the body such as the arms, shoulders, back or neck from operators where these symptoms can be affected by Musculoskeletal Disorders (MSDs). Therefore, ergonomics intervention is needed by performing calculations using assessments such as RULA (Rapid Upper Limb Assessment). In addition, to improve the ergonomics aspect, research was carried out by designing new products, namely assistive devices using the Quality Function Deployment method as a reference in the design process with an anthropometric approach with the aim of ensuring the assistive devices are designed according to the physical characteristics of the operator. After obtaining an appropriate design, the study succeeded in reducing the RULA score from 6 to 3, indicating an improvement in the ergonomics aspect.

Keyword: Musculoskeletal Disorders, Rapid Upper Limb Assessment, Quality Function Deployment, Anthropometry