ABSTRACT

In small-scale tofu manufacturing industries, the tofu-making process is still predominantly manual, using basic tools. One of these tofu producers is located in the Kayuringin Subdistrict, Bekasi City, West Java, Indonesia. The tofu industry in the Kayuringin Subdistrict still relies on traditional tools for production, lacking modern equipment in its processes. The tofu-making process involves several steps, including Soybean Soaking, Soybean Grinding, Soybean Boiling, Starch Separation or Filtration, Vinegar Mixing, Tofu Molding, and Tofu Cutting. In this particular tofu producer, the tofu cutting process is still done manually, involving numerous repetitive motions in horizontal, vertical, and diagonal cuts. These repetitive movements can lead to inefficient operations and cause fatigue and discomfort for the workers involved. Hence, this research aims to reduce the repetitive cutting processes and improve ergonomics in the tofu factory's cutting process. The designed tool is expected to address ergonomic issues in the cutting process and minimize repetitive cutting. To tackle this problem, the research utilized the RULA assessment and designed a new product, a tofu cutting tool, using the Quality Function Deployment method as a reference. The results of this research show improvements in ergonomic aspects, as evidenced by a decrease in the RULA score, and a reduction in the repetitive cutting processes.

Keyword- Design, RULA, Qua;ity Function Deployment