ABSTRAK

The high number of work accidents in the consumer goods industry is a more concern for business actors to reduce the risk of work accidents. Lack of attention to occupational health and safety is the cause of work accidents continues to increase. Researchers made observations to one of the industries in the field of consumption in the form of cassava chip production. Work accidents were found in the frying process that occurred to employees Riki Chips MSMEs, the impact of the work accident was in the form of burns and respiratory problems. A solution is needed to reduce the risk of work accidents in the form of cooking aids in the cassava chip frying process. This research was conducted to redesign frying utensils to minimize the risk of work accidents. Product design development is carried out using the Quality Function Deployment (QFD) method to focus the design process on user needs. From the results of the product, the proposal in the form of adding a lid to the pan is considered to be able to create a safer work environment. The lid of the pan is specially designed by adjusting the size of the existing product that is so large that it needs to be made a lid with a large design. The results of the proposed product are tested using the help of Computational Fluid Dynamic (CFD) software to see the success of adding the proposed product in answering the problem of work accident risk. From the test results, satisfactory results were obtained, with the results in the simulation obtained the majority of the surface and flow are blue, indicating that the components inside the lid can accumulate properly so as to prevent smoke and oil from hitting the outside environment of the lid.

Keyword : Planning, Riki Chips MSMEs, Risk of Work Accidents, QFD, frying utensils