ABSTRACT

Bottled Water (AMDK) is water that has been processed with special treatment and packaged in bottles or other packaging that qualified drinking water. AMDK Tirtawening is one of the companies under PDAM Bandung City that produce bottled water. This study focused on washing gallon because on the existing washing gallons conditions, is still done manually. Therefore, appear the washing gallon tool that combines three gallons washing production processes in one tool by previous researchers. In the previous design, the technical feasibility has not been used Rapid Upper Limb Assessment (RULA) then obtained a score of 5 (insert dirty gallon) and 6 (turned on the washing gallons). It can bring the fatigue impact too fast, even more AMDK Tirtawning conduct mass production that is 600 to 1,200 gallons per day

Washing equipment design ergonomic gallon can meminimalisirkan risk of fatigue in workers due to an awkward position. Perbaikkan design tool gallon washing begins by evaluating ergonomic conditions of the initial concept was selected. Ergonomic evaluation performed for consideration used in selecting the attributes of ergonomics with the principle ENASE (Effective, comfortable, safe, healthy, efficient). Improving the design tool gallon laundering using Ergonomic Function Deployment (EFD). Steps being taken that determine the attributes of products based on effective, convenient, safe, healthy and efficient (ENASE) subsequently acquired the attribute data needs on the concept of appliance laundering ergonomic and create a matrix of needs, at this stage to make the technical characteristics of the translation of each attribute needs, attributes requirements are translated into technical requirements or characteristics of the product is technically so that the user needs more regularly. The next stage is to determine the target specification for the technical characteristics, the value contained in the technical characteristics in the form of a target (value) and unit (unit) so that the needs of workers can be scalable and easy to manufacture the design in accordance with the technical characteristics.

Furthermore, House of Ergonomics to identify each attribute needs to metrics, analysis House of Ergonomics made by its mark on every attribute needs have linkages between technical characteristics. The last stage is the final specifications laundering gallon ergonomic tool consisting of units and value.

The results obtained from the methods Ergonomic Function Deployment (EFD) in the form of draft gallon washing appliance repair based on the principle ENASE to minimize the risk of fatigue based on the posture of workers.

Key Word: Ergonomic Function Deployment (EFD), fatigue, Evaluation of ergonomics, ENASE, washing equipment gallon.