

ABSTRACT

The chicken slaughtering process in UMKM (Micro, Small, and Medium Enterprises) is performed manually with a non-ergonomic squatting posture, resulting in a Rapid Entire Body Assessment (REBA) score of 10, which indicates a High Risk. This research aims to design an assistive tool that fulfills the EASNE (Effective, Safe, Healthy, Comfortable, and Efficient) principles to improve this work posture. The Ergonomic Function Deployment (EFD) method was utilized to translate worker needs into technical specifications. The concept development process included concept screening and scoring, 3D modeling, and functional prototype testing. The result of this research is a design for an assistive tool featuring 4 funnels made of Stainless Steel 304, equipped with a closed waste containment system and wheels for mobility. The most significant achievement is the improvement of the work posture to a dynamic standing position, which is proven to have lowered the REBA score from 10 (High Risk) to 5 (Medium Risk), equivalent to a 50% risk reduction. Therefore, the EFD method has been successfully proven to produce a design that effectively enhances the aspects of effectiveness, safety, health, comfort, and work efficiency.

Keywords: *Ergonomic Function Deployment, slaughtering aid, killing cone, work posture, REBA, MSDs.*