

ABSTRAK

Penelitian ini bertujuan untuk menghasilkan usulan desain meja potong ayam yang ergonomis pada proses penyembelihan di UMKM Safiq Broiler guna mengurangi risiko *Musculoskeletal disorders* (MSDs) pada pekerja, sekaligus berkontribusi pada pencapaian SDGs 3 (*Good Health and Well-being*) dan SDGs 8 (*Decent Work and Economic Growth*) yang menekankan kesehatan, keselamatan, serta kesejahteraan pekerja. Data yang digunakan meliputi data primer berupa hasil kuesioner *Nordic Body Map* (NBM), data postur kerja pekerja, data antropometri, dan kebutuhan pekerja melalui *Voice of Customer* (VoC), serta data sekunder berupa literatur terkait ergonomi dan MSDs. Metode yang diterapkan adalah *Rapid Entire Body Assessment* (REBA) untuk menilai tingkat risiko postur kerja pekerja dan *Ergonomic Function Deployment* (EFD) sebagai pendekatan perancangan fasilitas kerja ergonomis. Pengolahan data dilakukan dengan menilai postur kerja pada tiga tahap aktivitas penyembelihan menggunakan REBA, kemudian hasil penilaian tersebut menjadi dasar penerapan EFD melalui penyusunan *House of Ergonomic* (HOE) yang mengintegrasikan kebutuhan pekerja berbasis konsep ENASE dengan respon teknis perancangan, selanjutnya dimensi meja ditetapkan menggunakan data antropometri pekerja dan divisualisasikan menggunakan software Autodesk Inventor. Usulan desain meja potong ayam berhasil dirancang dengan dimensi panjang permukaan 140 cm, lebar 60 cm, dan tinggi *adjustable* 75–95 cm, dilengkapi fitur corong penahan ayam yang dapat disesuaikan, permukaan *stainless steel* tahan korosi, saluran pembuangan darah, wastafel, serta karet anti-selip, dengan total biaya produksi sebesar Rp 2.472.514,00, dan terbukti mampu menurunkan skor REBA dari 8 kategori risiko tinggi menjadi 3 kategori risiko rendah pada ketiga tahap aktivitas penyembelihan.

Kata Kunci: Meja Potong Ayam, *Ergonomic Function Deployment* (EFD), *Musculoskeletal disorders* (MSDs), *Rapid Entire Body Assessment* (REBA), Antropometri.

ABSTRACT

This study aims to produce a proposal for an ergonomic chicken slaughterhouse design in the slaughter process at Safiq Broiler MSMEs to reduce the risk of Musculoskeletal disorders (MSDs) in workers, while contributing to the achievement of SDGs 3 (Good Health and Well-being) and SDGs 8 (Decent Work and Economic Growth)) which emphasizes the health, safety, and welfare of workers. The data used included primary data in the form of Nordic Body Map (NBM) questionnaire results, worker posture data, anthropometry data, and worker needs through Voice of Customer (VoC), as well as secondary data in the form of literature related to ergonomics and MSDs. The method applied was Rapid Entire Body Assessment (REBA) to assess the level of risk of workers' work posture and Ergonomic Function Deployment (EFD) as an approach to designing ergonomic work facilities. Data processing was carried out by assessing the work posture at three stages of slaughtering activities using REBA, then the results of the assessment became the basis for the implementation of EFD through the preparation of a House of Ergonomics (HOE) which integrated the needs of workers based on the ENASE concept with the technical response of the design, then the dimensions of the table were determined using worker anthropometric data and visualized using Autodesk Inventor software. The proposed design of the chicken slaughterhouse was successfully designed with dimensions of 140 cm in surface length, 60 cm in width, and 75–95 cm in adjustable height, equipped with an adjustable chicken retaining funnel, corrosion-resistant stainless steel surface, blood drain, sink, and anti-slip rubber, with a total production cost of Rp 2,472,514.00, and proven to be able to reduce the REBA score from 8 high-risk categories to 3 low-risk categories in all three stages of slaughter activities.

Keywords: *Chicken Cutting Table, Ergonomic Function Deployment (EFD), Musculoskeletal disorders (MSDs), Rapid Entire Body Assessment (REBA), Anthropometry.*