

ABSTRAK

Penelitian ini bertujuan untuk menganalisis potensi bahaya dan melakukan perbaikan sistem keselamatan dan kesehatan kerja (K3) dengan menggunakan metode *Hazard Identification, Risk Assessment, and Risk Control (HIRARC)* di PT. Metalindo Teknik Utama. Latar belakang penelitian ini adalah tingginya angka kecelakaan kerja, baik ringan maupun berat, di perusahaan manufaktur karoseri kendaraan niaga seperti dump truck tersebut. Tujuan penelitian meliputi identifikasi potensi bahaya di lini produksi, penilaian tingkat risiko, serta pemberian rekomendasi pengendalian untuk meminimalkan risiko tersebut.

Penelitian dilakukan melalui observasi lapangan, wawancara dengan pihak HSE, serta analisis data kecelakaan kerja tahun 2024. Metode HIRARC digunakan untuk menilai tingkat kemungkinan (*likelihood*) dan keparahan (*severity*) dari setiap potensi bahaya yang ditemukan. Hasil penilaian menunjukkan bahwa Sebagian besar aktivitas berada pada kategori risiko sedang hingga tinggi, bahkan terdapat satu aktivitas dalam kategori risiko *ekstrem*.

Rekomendasi pengendalian risiko disusun berdasarkan prinsip hirarki pengendalian, mulai dari eliminasi, substitusi, rekayasa teknik (*engineering*), tindakan administratif, hingga penggunaan alat pelindung diri (APD). Penerapan pengendalian ini diharapkan dapat meningkatkan budaya keselamatan kerja, mengurangi angka kecelakaan, dan sekaligus mendukung produktivitas perusahaan secara keseluruhan.

Kata Kunci: Keselamatan dan Kesehatan Kerja (K3), *HIRARC*, Identifikasi Bahaya, Penilaian Risiko, Pengendalian Risiko.

ABSTRACT

This research aims to analyze potential hazards and improve the occupational safety and health (OHS) system using the Hazard Identification, Risk Assessment, and Risk Control (HIRARC) method at PT. Metalindo Teknik Utama. The background of this research is the high number of workplace accidents, both minor and serious, at the company manufacturing commercial vehicle bodies such as dump trucks. The research objectives include identifying potential hazards in the production line, assessing the risk level, and providing control recommendations to minimize these risks.

The research was conducted through field observations, interviews with HSE personnel, and analysis of 2024 workplace accident data. The HIRARC method was used to assess the likelihood and severity of each potential hazard identified. The assessment results indicated that most activities were categorized as moderate to high risk, with one activity even categorized as extreme risk.

Risk control recommendations were developed based on the hierarchy of control principles, ranging from elimination, substitution, engineering, administrative actions, to the use of personal protective equipment (PPE). The implementation of these controls is expected to improve the workplace safety culture, reduce accident rates, and simultaneously support overall company productivity.

Keywords: *Occupational Health and Safety (OHS), HIRARC, Hazard Identification, Risk Assessment, Risk Control*