

ABSTRACT

This study aims to analyze the potential hazards and risks of workplace accidents at PT ABC in order to encourage the implementation of a more optimal Occupational Safety and Health system for the creation of a safe working environment and a superior company. The study used the HIRARC (Hazard Identification, Risk Assessment, and Risk Control) method which includes hazard identification, risk assessment based on likelihood and severity, and risk control recommendations. Data was collected through field observations and interviews with workers from four divisions: Mechanical, Welding, Painting, and Office. The results of the analysis show that the highest risk occurs in the welding division due to exposure to welding fumes and the risk of electric shock, followed by the painting division which is exposed to chemicals, as well as the mechanical and office divisions with the risk of physical and electrical injuries. The majority of potential hazards are categorized as low to moderate risk, but there are some extreme risks that require special handling. This research resulted in risk control recommendations through technical engineering, administrative control, the use of Personal Protective Equipment (PPE), and the preparation of Standard Operating Procedures (SOP) for each division. In conclusion, the application of the HIRARC method has proven effective in identifying, assessing, and controlling potential hazards to create a safer and more productive work environment at PT ABC.

Keywords: Occupational Health and Safety, HIRARC, Hazard Identification, Risk Control, Standard Operating Procedure (SOP).

INTISARI

Penelitian ini bertujuan menganalisis potensi bahaya dan risiko kecelakaan kerja di PT ABC guna mendorong penerapan sistem Keselamatan dan Kesehatan Kerja (K3) yang lebih optimal demi terciptanya lingkungan kerja yang aman dan perusahaan yang unggul. Penelitian menggunakan metode *HIRARC (Hazard Identification, Risk Assessment, and Risk Control)* yang mencakup identifikasi bahaya, penilaian risiko berdasarkan tingkat kemungkinan dan keparahan, serta rekomendasi pengendalian risiko. Data dikumpulkan melalui observasi lapangan dan wawancara dengan pekerja dari empat divisi: Mekanik, *Welding*, *Painting*, dan *Office*. Hasil analisis menunjukkan bahwa risiko tertinggi terjadi pada divisi *welding* akibat paparan asap las dan risiko tersengat listrik, diikuti oleh divisi *painting* yang terpapar bahan kimia, serta divisi mekanik dan *office* dengan risiko cedera fisik dan listrik. Mayoritas potensi bahaya dikategorikan dalam risiko rendah hingga sedang, namun terdapat beberapa risiko ekstrem yang memerlukan penanganan khusus. Penelitian ini menghasilkan rekomendasi pengendalian risiko melalui rekayasa teknis, kontrol administratif, penggunaan Alat Pelindung Diri (APD), serta penyusunan *Standar Operasional Prosedur (SOP)* untuk masing-masing divisi. Kesimpulannya, penerapan metode *HIRARC* terbukti efektif dalam mengidentifikasi, menilai, dan mengendalikan potensi bahaya untuk menciptakan lingkungan kerja yang lebih aman dan produktif di PT ABC.

Kata kunci: Keselamatan dan Kesehatan kerja (K3), *HIRARC*, Identifikasi Bahaya, Pengendalian Risiko, *Standar Operasional Prosedur (SOP)*