

**PENERAPAN METODE HIRARC DALAM MENINGKATKAN
EFEKTIVITAS PENGURANGAN KECELAKAAN KERJA
PADA PELATIHAN PENGELASAN
SHIELDED METAL ARC WELDING
(STUDI KASUS UPTD BLK KOTA PROBOLINGGO)**

Nama : Endik Zainur Ridwan
NIM : 225410001
Pembimbing I : Dr. Trismawati, S.Si., M.T.
Pembimbing II : Kurnia Iswardani, S.T., M.T.

ABSTRAK

Keselamatan dan kesehatan kerja (K3) berperan penting dalam mencegah kecelakaan, terutama pada pelatihan pengelasan *Shielded Metal Arc Welding* (SMAW) yang memiliki risiko tinggi. Penelitian ini bertujuan menganalisis penerapan metode *Hazard Identification, Risk Assessment, and Risk control* (HIRARC) dalam meningkatkan efektivitas pengurangan kecelakaan kerja di UPTD BLK Kota Probolinggo.

Metode penelitian menggunakan pendekatan deskriptif kuantitatif dengan observasi, wawancara, dan dokumentasi. Analisis dilakukan melalui tiga tahap HIRARC: identifikasi bahaya, penilaian risiko, dan pengendalian risiko. Efektivitas diukur dari penurunan nilai, peningkatan kepatuhan peserta terhadap APD, serta berkurangnya kejadian kecelakaan kerja.

Hasil menunjukkan penerapan HIRARC menurunkan risiko dari kategori *High risk* menjadi *medium* dan *low risk*. Kepatuhan peserta terhadap prosedur k3 juga meningkat signifikan. Dengan demikian, penerapan metode HIRARC terbukti efektif dalam meningkatkan efektivitas pengurangan kecelakaan kerja pada pelatihan pengelasan SMAW.

Kata Kunci : HIRARC, K3, Pengelasan SMAW, Kecelakaan Kerja, Efektivitas

Halaman sengaja di kosongkan

***THE IMPLEMENTATION OF THE HIRARC METHOD IN
IMPROVING THE EFFECTIVENESS OF OCCUPATIONAL
ACCIDENT REDUCTION IN SHIELDED METAL ARC
WELDING TRAINING***

(Case Study at UPTD BLK Kota Probolinggo)

<i>By</i>	: Endik Zainur Ridwan
<i>Student Identity Number</i>	: 225410001
<i>Supervisor I</i>	: Dr. Trismawati, S.Si., M.T.
<i>Supervisor II</i>	: Kurnia Iswardani, S.T., M.T.

ABSTRACT

Occupational safety and health (OSH) plays a crucial role in preventing workplace accidents, particularly in Shielded Metal Arc Welding (SMAW) training, which involves High-risk activities. This study aims to analyze the implementation of the Hazard Identification, Risk Assessment, and Risk Control (HIRARC) method in improving the effectiveness of occupational accident reduction at UPTD BLK Kota Probolinggo.

The research method employed a descriptive quantitative approach using observation, interviews, and documentation. The analysis was conducted through the three stages of HIRARC: Hazard Identification, risk assessment, and risk control. Effectiveness was measured based on the reduction in values, increased compliance of participants with personal protective equipment (PPE), and a decrease in the occurrence of workplace accidents.

The results indicate that the implementation of the HIRARC method successfully reduced risks from the High-risk category to medium and low-risk categories. Participant compliance with occupational safety and health procedures also showed a significant improvement. Therefore, the application of the HIRARC method is proven to be effective in enhancing the effectiveness of occupational accident reduction in SMAW welding training

Keywords : HIRARC, OSH, SMAW Welding, Workplace Accidents, Effectiveness

Halaman sengaja di kosongkan