

**ANALISIS POTENSI KECELAKAAN KERJA PADA BAGIAN  
PERCETAKAN PENGECORAN LOGAM DI PT. SINAR SEMESTA  
MENGUNAKAN METODE *JOB SAFETY ANALYSIS* (JSA) DAN  
*HAZARD IDENTIFICATION RISK ASSESMENT AND RISK CONTROL*  
(HIRARC)**

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**Abstrak**

Penelitian ini dilakukan untuk menganalisis potensi kecelakaan kerja pada bagian percetakan pengecoran logam di PT. Sinar Semesta. Berdasarkan data tahun 2023, tercatat empat insiden kecelakaan kerja yang melibatkan luka bakar dan cedera akibat logam. Penelitian ini menggunakan metode Job Safety Analysis (JSA) dan Hazard Identification, Risk Assessment, and Risk Control (HIRARC) sebagai pendekatan untuk mengidentifikasi bahaya, menilai tingkat risiko, dan merancang pengendalian yang sesuai. Hasil analisis menunjukkan adanya 7 potensi bahaya kerja dan 5 aktivitas kerja yang menyebabkan kecelakaan, dengan tingkat risiko bervariasi dari rendah hingga ekstrem. Pengendalian risiko dilakukan melalui pendekatan administratif dan penggunaan alat pelindung diri (APD) yang tepat. Rekomendasi perbaikan difokuskan pada peningkatan kesadaran K3, pelatihan keselamatan kerja, serta penerapan prosedur keselamatan secara ketat untuk menekan angka kecelakaan kerja.

**Kata Kunci:** Kecelakaan Kerja, JSA, HIRARC, Percetakan Pengecoran Logam, Keselamatan dan Kesehatan Kerja (K3)

# ***ANALYSIS OF WORKPLACE ACCIDENT POTENTIAL IN THE METAL CASTING PRINTING SECTION AT PT SINAR SEMESTA USING THE JOB SAFETY ANALYSIS (JSA) AND HAZARD IDENTIFICATION RISK ASSESSMENT AND RISK CONTROL (HIRARC) METHODS***

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## ***Abstract***

*This study was conducted to analyze the potential for workplace accidents in the metal casting printing department at PT Sinar Semesta. Based on 2023 data, four workplace accident incidents involving burns and metal-related injuries were recorded. This study used the Job Safety Analysis (JSA) and Hazard Identification, Risk Assessment, and Risk Control (HIRARC) methods to identify hazards, assess risk levels, and design appropriate controls. The analysis revealed seven potential occupational hazards and five work activities that could lead to accidents, with risk levels ranging from low to extreme. Risk control was implemented through an administrative approach and the use of appropriate personal protective equipment (PPE). Recommendations for improvement focused on increasing occupational safety (OHS) awareness, occupational safety training, and strict implementation of safety procedures to reduce the number of workplace accidents.*

**Keywords:** *Occupational Accidents, JSA, HIRARC, Metal Casting Printing, Occupational Safety and Health (OHS)*

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