

RISK ASSESSMENT EVALUATION USING HAZARD IDENTIFICATION RISK ASSESSMENT CONTROL (HIRAC) METHOD IN PT.INKA (Persero) Madiun

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ABSTRACT

Hazard Identification Risk Assessment Control (HIRAC) was a risk assessment method to reduce hazards so as to minimize work accidents. The purpose of this research is to support Occupational Health and Safety Management System (SMK3) in achieving zero accidents. Risk assessment using the IRAC method includes hazard identification, risk analysis, and control.

This type of research was observational research, analyzed descriptively using direct observation methods, interviews, assessments, and reviewers of SMK3 documents. The object of research in the fabrication unit and the subject of interview were 10 people. Data were analyzed based on the HIRAC assessment criteria.

The results showed that the hazard factors in the fabrication unit include mechanical hazards, electrical hazards, physical hazards, chemical hazards, and ergonomic hazards. Based on the risk analysis found 49 risk factors and 58 risks. 19 risks are classified as Low risk, 30 risks are classified as Moderate risk, and 9 risks are classified as high risk. Controls that have been carried out are administrative, engineering, and PPE controls.

The most common hazards are mechanical hazards. Based on the frequency of highest likelihood, namely the hazard due to welding sparks and plate pinching. Meanwhile, based on the frequency of highest severity, namely on crane hazards and electrical hazards. It is recommended to increase control of PPE to reduce the risk of danger from operating the machine and to review control suggestions to determine level of effectiveness of suggestions given.

Keywords: SMK3, HIRAC, danger, Risk