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ABSTRACT

Title of Abstract : Job Safety Analysis of Forklift Loading and Unloading Activities at PT

United Tractors Balikpapan

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Background: Work in the industrial sector has a high potential for occupational accidents, especially in material handling activities using heavy equipment such as forklifts. Unsafe actions, unsafe conditions, and lack of operator competence can increase the risk of accidents. Therefore, identifying and controlling workplace hazards is essential to improve occupational safety performance

Objective: This study aims to identify potential hazards and assess the level of risk during forklift loading and unloading operations at PT United Tractors Balikpapan using the Job Safety Analysis (JSA) method.

Research Methods/ Implementation Methods: This is a descriptive qualitative study conducted through field observation, interviews with three informants (supervisor, forklift operator, and HSE officer), and documentation review. Data were analyzed using Job Safety Analysis (JSA) to determine potential hazards, probability, severity, and control measures.

Results: The study identified 15 potential hazards in 8 work stages, including risks of electric shock, falling objects, pinching, and non-ergonomic posture injuries. The main contributing factors were human error, equipment condition, and work environment. Preventive measures include certified operator training, regular equipment maintenance, and consistent use of personal protective equipment (PPE).

Conclusion/Lesson Learned: The application of Job Safety Analysis effectively helps identify workplace hazards and improves safety management in forklift operations. Continuous training, supervision, and hazard monitoring are recommended to minimize accident risks.

Keyword: Job Safety Analysis, Forklift, Occupational Safety, Risk Assessment, PT United Tractors