

## ABSTRACT

Forklift is a kind of craning plane that supports production process with quiet high peril potentials and possibilities of working accidents. Thus, prevention efforts with peril identifications using the technique of job safety analysis are required. The purpose of this research is to identify perils using the technique of job safety analysis in operating forklifts at general engineer division of PT PAL Indonesia, Surabaya.

This research is an observational descriptive research. The subject of this research is all forklift operators at general engineer division of PT PAL Indonesia with 2 samples. The observed variable is the peril identification of every working phase in operating forklifts at general engineer division of PT PAL Indonesia with a cross sectional approach. The primary data were collected by executing observations and interviews, while the secondary data were collected from the related company. Later on, the data were processed descriptively.

The result of JSA forklift operation at general engineer division of PT PAL Indonesia shows that there are 5 working phases, which are inspections before operating the machines, the operating process, and post operation. The present peril potentials are the chance of forklifts being ablaze and exploding in the process of fueling, sprained ankles and arms, accidental slipping, dusts, scratched feet, accidental falls, burned wires, gas remnant inhalation, cramped hands, material accidents, material overload, visual blocking and unstable forklifts, operators falling off of the forklifts, crashes, overthrown forklifts, falling passengers, forklift break down, slippery and uneven parking lot, being stumbled by forks, forklifts being used by non operators, and being stained by overheated radiator liquid.

The suggested act of prevention leads to operator certification, SOP revision, detailed safety induction supply, and safety sign and specific road mark for forklifts supply at forklift working area.

Keywords: hazard identification, job safety analysis, forklift

## ABSTRAK

Forklift merupakan salah satu pesawat angkat dan angkut yang mendukung pelaksanaan proses produksi dengan potensi bahaya cukup tinggi, dan terdapat kemungkinan terjadi kecelakaan kerja. Sehingga perlu dilakukan upaya pencegahan dengan identifikasi bahaya menggunakan teknik job safety analysis. Tujuan penelitian ini adalah melakukan identifikasi bahaya menggunakan teknik job safety analysis pada pengoperasian forklift di PT PAL Indonesia divisi rekayasa umum Surabaya.

Penelitian ini merupakan penelitian deskriptif observasional. Subjek penelitian ini adalah seluruh operator forklift PT PAL Indonesia divisi rekayasa umum dengan sampel dari penelitian ini berjumlah 2 operator. Variabel yang diteliti adalah mengidentifikasi bahaya disetiap langkah kerja pada pengoperasian forklift di PT PAL Indonesia divisi rekayasa umum dengan pendekatan cross sectional. Data primer diperoleh dengan menggunakan observasi dan wawancara, serta data sekunder yang diperoleh dari perusahaan. Selanjutnya data diolah secara deskriptif.

Hasil dari JSA pengoperasian forklift di PT PAL Indonesia divisi rekayasa umum yaitu terdapat 5 langkah kerja diantaranya: pemeriksaan sebelum beroperasi, penghidupan mesin, pengoperasian, dan setelah pengoperasian. Potensi bahaya yang ada diantaranya: forklift terbakar dan meledak saat pengisian bahan bakar, kaki terkilir dan terbentur, tangan kesleo, terpeleset, debu, kaki tergores, terpeleset dan terjatuh, konsleting, terhirup gas buang, kram tangan, tertimpa material, material overload, menghalangi pandangan dan forklift tidak stabil, operator jatuh dari forklift, menabrak atau bertabrakan, forklift terguling, penumpang terjatuh, forklift mogok, area parkir licin dan tidak rata, tersandung garpu, forklift digunakan oleh orang selain operator, terpeleset dan terjatuh, dan terpercik air radiator yang panas.

Tindakan pengendalian yang disarankan mengarah pada sertifikasi operator, merevisi SOP, memberikan safety induction secara terperinci, dan memberi safety sign dan marka jalan khusus forklift di area kerja forklift.

Kata kunci : identifikasi bahaya, job safety analysis, forklift