

ABSTRACT

PT BJTI Surabaya is a subsidiary of PT PELINDO III (Persero) which is trusted for the supply and maintenance of port loading and unloading equipment in Berlian terminal area. The activities at the container port have a very high risk, because the equipment used is a lifting plane for heavy lifting. Based on the results of observations, a work accident once happened to mechanics who are doing machine maintenance. The accident was caused by unsafe actions. This study was conducted to analyze the factors related to unsafe actions in the application of machine maintenance procedures. According to the ILCI theory, unsafe actions are caused by management factors (availability of machine maintenance procedures) and basic causal factors, consisting of individual characteristics (age, education, years of work and knowledge), as well as occupational factors (supervision and work procedures).

This research is a type of observational research with cross sectional design. The samples of this study were 35 workers from the total population of 43 mechanical workers of lifting aircraft. The samples were taken from mechanics included in the inclusion criteria of HMC mechanical workers (Harbor Mobile Crane). The data were obtained through observation and filling questionnaires to workers. The data presented in the form of the distribution of frequency and cross tabulation were analyzed statistically by using Spearman test.

The results showed that unsafe actions in the implementation of machine maintenance procedures committed by workers in moderate category equal to 48.6%. The correlation results indicate a relatively low relation between age, education and supervision, and a strong relation between working period, knowledge and availability of treatment procedures. The variable which has a very strong relation is work procedure equal to 0,885.

The conclusion is working period has a negative correlation, that the longer the working period, the higher the unsafe actions while the better the knowledge, the supervision, the working procedures and the availability of machine maintenance procedures, the lower the unsafe actions. The working procedure need to be socialized to the worker. In order to reduce the unsafe actions, the availability of field supervisor as well as regular and periodic inspections during machine maintenance is significantly needed.

Keywords : unsafe actions, machine maintenance procedure, mechanic, the container port

ABSTRAK

PT BJTI Surabaya merupakan anak perusahaan PT PELINDO III (Persero) yang dipercaya untuk penyediaan dan perawatan alat bongkar muat pelabuhan di kawasan terminal Berlian. Kegiatan di pelabuhan petikemas sangat beresiko tinggi, karena peralatan yang digunakan merupakan pesawat angkat angkut untuk pengangkatan berat. Berdasarkan hasil observasi pernah terjadi kecelakaan kerja pada mekanik yang sedang melakukan perawatan mesin, kecelakaan yang terjadi disebabkan karena tindakan tidak aman. Penelitian ini dilakukan untuk menganalisis faktor yang berhubungan dengan tindakan tidak aman dalam penerapan prosedur perawatan mesin. Menurut teori ILCI tindakan tidak aman disebabkan karena faktor manajemen (ketersediaan prosedur perawatan mesin) dan faktor penyebab dasar, yang terdiri dari karakteristik individu (usia, pendidikan, masa kerja dan pengetahuan), serta faktor pekerjaan (pengawasan dan prosedur kerja).

Penelitian ini adalah jenis penelitian observasional dengan desain *cross sectional*. Sampel penelitian ini sebanyak 35 pekerja dari total populasi sebanyak 43 pekerja mekanik pesawat angkat angkut. Sampel diambil mekanik yang termasuk dalam kriteria inklusi yaitu pekerja mekanik HMC (*Harbour Mobile Crane*). Data didapatkan melalui observasi dan pengisian kuisioner kepada pekerja. Data disajikan dalam bentuk distribusi frekuensi dan tabulasi silang dianalisis secara statistik menggunakan uji *Spearman*.

Hasil penelitian menunjukkan bahwa tindakan tidak aman dalam penerapan prosedur perawatan mesin yang dilakukan pekerja dengan kategori sedang sebesar 48,6%. Hasil korelasi menunjukkan ada hubungan yang relatif rendah antara usia, pendidikan dan pengawasan, hubungan yang cukup kuat adalah masa kerja, pengetahuan dan ketersediaan prosedur perawatan. Variabel yang ada hubungan sangat kuat adalah prosedur kerja sebesar 0,885.

Kesimpulannya adalah masa kerja berkorelasi negatif bahwa semakin lama masa kerja semakin tinggi tindakan tidak aman, sedangkan semakin baik pengetahuan, pengawasan, prosedur kerja dan ketersediaan prosedur perawatan mesin maka semakin rendah tindakan tidak aman. Perlu sosialisasi prosedur kerja kepada pekerja dan untuk mengurangi tindakan tidak aman perlu disediakan pengawas lapangan serta melakukan inspeksi secara rutin dan berkala pada saat perawatan mesin.

Kata Kunci : tindakan tidak aman, prosedur perawatan mesin, pekerja mekanik, terminal petikemas