

**TESIS**

**ANALISIS *SAFE BEHAVIOR* PADA PENERAPAN ALAT PELINDUNG DIRI UNTUK PEKERJAAN DI KETINGGIAN (*WORKING AT HEIGHT*) DENGAN METODE *DO-IT* DI PT.X**



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**UNIVERSITAS AIRLANGGA  
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PROGRAM STUDI KESEHATAN DAN KESELAMATAN KERJA  
SURABAYA  
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**Untuk memperoleh gelar Magister Kesehatan dan Keselamatan Kerja  
Program Studi Kesehatan dan Keselamatan Kerja  
Fakultas Kesehatan Masyarakat  
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SURABAYA  
2015**

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Fakultas Kesehatan Masyarakat Universitas Airlangga  
dan diterima untuk memenuhi persyaratan guna memperoleh gelar  
Magister Kesehatan dan Keselamatan Kerja (M.KKK)  
Pada tanggal 22 Juni 2015**

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**PERSETUJUAN**

**TESIS**

**Diajukan sebagai salah satu syarat untuk memperoleh gelar  
Magister Kesehatan dan Keselamatan Kerja (M.KKK)  
Program Studi Kesehatan dan Keselamatan Kerja  
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## PERNYATAAN TENTANG ORISINALITAS

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Octavianus Hutapea

## KATA PENGANTAR

PujisyukurkehadiratTuhan Yang Maha Kuasa atasKarunia-Nyasehingga penyusunantesisdenganjudul“ANALISIS *SAFE BEHAVIOR* PADA PENERAPAN ALAT PELINDUNG DIRI UNTUK PEKERJAAN DI KETINGGIAN (*WORKING AT HEIGHT*) DENGAN METODE *DO-IT* DI PT.X”inidapatterselesaikan.

Tesisiniberisikanmengenaihasilanalisis*safe behavior* pada penerapan alat pelindung diri untuk pekerjaan di ketinggian (*working at height*).Tesisinibertujuanuntukmelakukananalisis *safe behavior*pada penerapan alat pelindung diri untuk pekerjaan *working at height*dengan metode *DO-IT*.Hasilpenelitianiniakandigunakansebagai bahan untukmelaksanakantindaklanjuti perusahaandalampeningkatanpelaksanaanprogram BBS.

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Surabaya,22 Juli2015

Penulis

## SUMMARY

### SAFE BEHAVIOR ANALYSIS USING DO-IT METHOD ON THE APPLICATION OF PERSONAL PROTECTIVE EQUIPMENT FOR WORKING AT HEIGHT IN PT.X

Preventive maintenance program was one of the programs implemented in the oil and gas industry, the purpose was to support operational systems in order to maintain and functioning the equipment in properly manner. The program was created to support the operating system that focuses on maintenance, repairs and modifications based on scheduled operational equipment. Most of the maintenance and repairs were carried out in a position that can not be reached with normal body size as a human being, so we called it as working at heights activities categories.

During implementation of job working at height the employer must wear as far as possible to provide and maintain a safe workplace by providing clear information and warning systems, training, supervision and personal protective equipment (PPE), accordance to the type of work. Working at height (WAH) always as health and safety concern in all sector industries, because the accident occurred not only in oil and gas industry but also covers to other industrial sectors such as construction, mining, services and other sectors. The purpose of this study to analyze the implementation of safe behavior on personal protective equipment for work at height with DO-IT (Define, Observe, Intervene, Test) method in PT.X. Benefit of this research was to give an overview of the behavior and determine the safe behavior factors of worker.

The highest age of workers was 41 years old and the lowest age of workers was 25 years old. Workers with the longest working period was 19 years and the shortest working period was at least 2 years. 1 worker ( 6.67% ) had a primary school education , six workers ( 40 % ) had secondary school education , 5 workers ( 33.33 % ) had a high school education , and three workers ( 20 % ) had a college education. 11 workers (73.3%) could well define how to work safely at heights. Observation results used Critical Behavioral Checklist (CBC), which was developed according to the case study, showed that 8 workers (53.3%) working under the safe standard of behavior index.

The mean total score of safe behavior index (SBI), the worker is 77.53%, so it was said still below the safe standard of behavior, the average highest score was score of 93.75% and the lowest rate was 68.75%. The number of workers which work in accordance the standards of safe behavior in 2014 amounted to 3 workers, while the number of workers who work not in accordance the standards of safe behavior in 2014 amounted to 12 workers. The majority of workers which



safe behavior is still below the standards in the age range 31-40 years, at the junior high education level and length of employment <5 years.

The mean total score of safe behavior index (SBI) after intervention program, the worker was 82.73%, so it was said still below the safe standard of behavior, while the highest mean score was 94.25% and the lowest was 71.25%. The number of workers which work in accordance with the standards of safe behavior in 2015 amounted to 7 workers, while the number of workers who work not in accordance with the standards of safe behavior in 2015 amounted to 8 workers. The majority of workers which still below the safe standard of behavior were workers at aged <31 and the age range of 31-40 years, to the high school education level and length of employment <5 years. There is a statistically significant relationship between education and training, working at height rule, working at height procedure, positive reinforcement, negative reinforcement, punishment against the test results. Based on the results of analysis show that 8 workers (53.3%) received the test results with good criteria. Conclusion: define variables affect the outcome of the evaluation phase (test) on workers by 42.25%, observed variables (safe behavior index) affect the outcome of the evaluation phase (test) on workers by 37.21%, and all intervention programs had correlation with test results.