

Anan Malinee 2010: Development of a Program Aided Analysis of Safety Working Point: Case Study of Auto Part Manufacturing Plant. Master of Engineering (Safety Engineering), Major Field: Safety Engineering, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Saeree Svetasreni, D.Eng. 95 pages.

The development of a program aided analysis of safety working point is the computer software development for the purpose of data collection and analysis for the risk assessment and aided analysis of safety working point. The program is able to report the result of analysis for using in protection and control accident at work for the automotive part manufacturing.

This research studies the workflow of the limited traditional process and the result to study users' requirements to design data structures and databases in computer program development by using Microsoft Access to store information and using Borland Delphi in program development. The results of program development is tested for the system and program's applications by users in 9 units of IHI turbo (Thailand) Co., Ltd. and also tested for the application in the actual accident that occurred in the factory for program verification.

The result from this research achieves the program aided analysis of safety working point that is accurate, and users have given a very high rating for satisfaction and program's applications which meet the requirements very well, easy to use. User can print out the analysis results in the form of a report which is possible to revise or search for information. Therefore, this is a new practical tool that is good for risk assessment and analysis of safety working point in auto part manufacturing plant.

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Student's signature

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Thesis Advisor's signature