


Amnard Hemasathon 2006: Fire Protection for Plastic Industry. Master of Engineering (Mechanical Engineering), Major Field: Mechanical Engineering, Department of Mechanical Engineering. Thesis Advisor: Mr. Chatchawan Jittiruangkit, M.S. 240 pages.
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Fire protection for plastic industry has the objective for analysis the conflagration occurrence in order to be the guideline for fire prevention and design of the automatic sprinkler system for the plastic factory. This research consist of the study of fire mechanism and National Fire Protection Association (NFPA) standard and the result of factories survey about their process and fire protection system which are used in this present time as well as gathering the data to determine the fire prevention and appropriate fire suppression system. Then, the risk assessment for analysis of the cause of fire that was performed and the critical point from the process.

From the analysis of the research that demonstrate the method for fire prevention system to be equipped. And, That show the case study of designing automatic sprinkler system. As a result, the automatic sprinkler system calculation has been demonstrated for appropriate required flow rate and pressure at reference point to be used for the compatible fire pump selection with appropriate water flow and pressure. Results from calculation compare with the results from the program FHC Hydraulic Analysis Software Version : 1.3.2 has been appeared for equal calculation.



Student's signature



Thesis Advisor's signature

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