

Winyoo Somsaard 2010: A Program of Automatic Warehouse Sprinkler System.
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Montri Thamrongphiroon, D.Eng. 220 pages.

In case of fire occurring in a warehouse, it is violent and very fast. The design in NFPA13 chapter 12 Standard for the Installation of Sprinkler Systems requires many steps and complicated specifications that make mistakes. The steps of calculation and details were studied to develop this program with Visual Basic 2008 for personal computer.

The users have to input designed data such as commodity type, pipe length, pipe size, pipe type and sprinkler K factor. Program operated to choose basic designed data for calculation of friction loss, elevation loss, total pressure requirement and minimum system flow requirement. Moreover, the users can change the basic design data to compare and analyst the results. Program compute without starting input data from the first step. This computer program were more convenience and faster than the manual calculation.

The computer program was able to compile the results on the given water density application. Accordingly, the users could select the optimal size of water pipe and fire pump.

Student's signature

Thesis Advisor's signature