

CHAPTER FIVE

CONCLSION AND
RECOMMENDATION

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Conclusion and Recommendation

5.1. Conclusion

This thesis described the appropriate implementation of the fire fighting system design parameters using the standards from the NFPA (National Fire Protection Association). In this thesis different two cases selected to apply the accurate design. First case was a production workshop, for this case a complete design of the sprinkler system was done which included; selection of the sprinklers network, selection of the pipes materials and diameters, calculation of GPM and pressure and the tank size. The program of Elite for fire fighting calculation software is used to calculate the mentioned parameters beside the analytical calculation, there are few different between the results in the two ways of calculation for differed fuzziness in each way. Second case was an electronic lap, for this case two separated designs of FM-200 Agent System and CO2 Agent System were done using the simulation program of plumbing and firefighting calculations, each design included total weight and number of cylinders required. Second case design shown that the total weight required of FM-200 Agent is less than CO2 Agent so it needs a few number of cylinders. Economically the shows that Fm-200 system is expensive about 20 times more than CO2 system.

5.2. Recommendation

From the results it recommended that

- Other designs using other standard codes such as British Standard (BS) or ISO standard and compare the results with National Fire Protection Association (NFPA) code.
- Comparing between FM-200 system and CO2 system by making separated two designs using each system alone for same case of design.