

# Fire Service Mechanical Fitter Intermediate Trade Test Study Material for Written Test

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此文件關於消防機械裝配工中級工藝測試技術知識測試（筆試）內容參考資料。  
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# Fire Service Mechanical Fitter Intermediate Trade Test

## Study Material for Written Test

This study material is a reference for candidate to prepare for attending written test in Intermediate Trade Test:

1. According to Codes of Practice (COP) for Minimum Fire Service Installations and Equipment And Inspection, Testing And Maintenance Of Installations And Equipment, the centre of hydrant outlet couplings should be located in between 800mm to 1200mm above finished floor level.
2. Fire hose reel nozzles should be housed in a glass-fronted cabinet secured under lock and key. The glass panel should be made of frangible type (brittle) and should not exceed 1.5mm thick.
3. When installing fire hydrant or hose reel system, all rising, and down coming mains should be permanently primed with water and fitted with air relief valves at suitable locations to prevent air lock during installation.
4. During pressure test for water leakage, it is necessary to allow gas exhaust from pipes when injecting water into pipes, check whether the draft line moves downward (i.e. pressure drop) during pressurization and make sure the test pressure satisfy the construction requirement.
5. When installing automatic sprinkling systems in most commercial/industrial buildings, jockey pump should be installed in order to maintain the water pressure for the system.
6. According to Waterworks Ordinance (WWO), drainpipe should be installed at the water storage tank in order to empty the standing water in the tank.
7. To tighten the flanges, it should be tightened gradually in diagonal angles.
8. To distinguish a copper gate valve and a loose jumper type stopcock by their appearance, loose jumper type stopcock has water flow direction and screw type handle.
9. Where pipes pass through the slab and wall, pipe sleeve with uniform annular clearance of 2-12mm should be provided.
10. According to COP published by Fire Services Department (FSD), a hose reel should be installed that its control valve and nozzle should be situated adjacent to each other and at a position not more than 1350 mm above finished floor level.

11. According to COP of FSD, the maximum length of rubber tube fire hose reel should not exceed 30 metres.
12. According to COP of FSD, the centre of inlet couplings should be not less than 600mm nor more than 1000 mm above the ground level.
13. When fire breaks out, water valve opens which cause water to activate mechanical fire bell and alarm valve devices sets off alarm.
14. The symbol “回” showed on hand-held electrical tools means it is double insulated and no earthing is needed.
15. According to WWO, full open gate valve should be installed for fire services water tank.
16. According to Technical Requirements for Plumbing Works in Buildings published by Water Supplies Department (WSD), fire hose reel nozzle should be place in a glass-fronted cabinet secured under lock and key. Metal or plastic striker should be installed near the box.
17. After inspection of a fire control system, the system should be reset to “normal” and “automatic” before leaving the site.
18. A hole with 6-inch diameter on the slab should be reserve for a pipe with 4-inch diameter to pass through.
19. When operating an electrical threading machine, the operator should take off the gloves and wear the safety goggles. Operator should tighten the pipes and choose the correct threading plates and rotating speed. Operator should be concentrated and operated the machine carefully.
20. When metal debris/scrap are twining pipe threading machine, operator should stop the machine by pressing stop button and switch off the machine. Then, operator should use an iron hook to remove the metal debris/scrap.

**Precautions**

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