

- I. JOB TITLE : FIRE SERVICES MECHANIC
- II. JOB LEVEL : SKILLED WORKER
- III. JOB DESCRIPTION : Installs, tests, inspects, maintains and repairs fire services piping systems, automatic fire alarm (AFA) and manual fire alarm systems, mechanical/electrical/electronic parts of fire services systems, and maintains, inspects and repairs portable fire services equipment.
- IV. TRADE SKILLS : Ability to:
1. Correctly use and maintain the tools of the trade including power tools, test equipment and measuring instruments.
  2. Install, operate and properly maintain fire services systems and equipment according to stipulated procedures.
  3. Locate and repair faults in fire services systems and equipment.
  4. Overhaul and service mechanical/electrical/electronic parts of fire services systems and equipment.
  5. Use safety equipment, and protective devices and equipment.
  6. Read and interpret fire services system schematic drawings, installation plan, electrical wiring and circuit diagrams, spacing requirements and layout plans.
  7. Install, inspect, maintain and repair various types of portable fire services equipment in accordance with prevailing fire regulations and/or manufacturer's instructions.
  8. Correctly dispose waste chemicals, equipment containing radioactive substances and unused extinguishing agents involved.
  9. Inspect, test and commission fire services systems.

10. Correctly instruct, supervise and transfer skills to any apprentice and semi-skilled worker assigned to him to ensure safety and quality of work.

V. TRADE THEORY : Knowledge of:

1. Basic fire services engineering technology:
2. Basic workshop practice, engineering materials, pipe work practice and welding.
3. Line diagrams and layout drawings for fire services system.
4. Operating principles of mechanical/electrical/electronic equipment of fire services system.
5. Basic operating principles of fire extinguishing agents including gaseous extinguishing agents and its applications.
6. Basic operating principles and functions of various types of fire services portable equipment.
7. Basic environmental technology.
8. Motors and starting methods and control equipment.
9. Single and three-phase circuit, earthing and general protection.
10. Pump alignment.
11. Interface between mechanical, electrical and electronic equipment of fire services system, and between fire services system and building services system in a building.
12. Workshop Management for Class 3 FSI Contractor.
13. Industrial hazards, safety and health precautions, energy saving and environmental concerns.
14. Installation practice and regulations, and relevant codes of practice.

15. Relevant ordinances and regulations.

VI. ENTRY ROUTE

: Preferred Minimum Entry Qualification:

Completion of Secondary 3.

Training:

4-year organized apprenticeship or 3-year organized apprenticeship if preceded by a relevant one-year full-time basic craft course, with attendance at a relevant part-time day-release or block-release craft course in an institute of vocational education or equivalent.

VII. STATUTORY  
REQUIREMENT

: A qualified fire services mechanic should be a registered Class 3 FSI Contractor under the 'Fire Services Ordinance Chapter 95'.