

DEPARTMENT OF INDUSTRIAL RELATIONS  
Office of the Director – Research Unit  
455 Golden Gate Avenue, 9<sup>th</sup> Floor  
San Francisco, CA 94102

ADDRESS REPLY TO:

*P.O. Box 420603  
San Francisco CA 94142-0603*



## SCOPE OF WORK PROVISION

FOR

**PLUMBER:**  
FIRE SPRINKLER FITTER

IN

IMPERIAL COUNTY

The information in this packet is not based on a collective bargaining agreement.

Source:

Dictionary of Occupational Titles, Fourth Edition, Revised 1991  
O\*NET 98, The Occupational Information Network, Viewer Version 1.0

United States Department of Labor  
Office of Administrative Law Judges Law Library



**DICTIONARY OF OCCUPATIONAL TITLES**  
**Fourth Edition, Revised 1991**

**862.281-022 PIPE FITTER (construction) alternate titles: plumber, pipe fitting**

Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws, pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and handtools. Secures pipes to structure with brackets, clamps, and hangers, using handtools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using handtools. Installs and maintains refrigeration and air-conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using handtools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using \$T3\$ teach pendant, \$T1\$ control panel, or keyboard and display screen of \$T3\$ robot controller \$T1\$ and \$T3\$ programmable controller \$T1\$. May be designated Steam Fitter (construction) when installing piping systems that must withstand high pressure. May be designated according to type of system installed as Pipe Fitter, Ammonia (construction); Pipe Fitter, Fire-Sprinkler Systems (construction); Pipe Fitter, Gas Pipe (construction); or type of piping used as Pipe Fitter, Plastic Pipe (construction); Pipe Fitter, Soft Copper (construction). May be designated: Airdox Fitter (mine & quarry); Freight-Air-Brake Fitter (railroad equip.); Instrument Fitter (construction); Maintainer, Sewer-And-Waterworks (construction); Pipe Fitter, Maintenance (any industry); Pipe Fitter, Welding (construction); Pneumatic-Tube Fitter (construction); Sprinkler-And-Irrigation-System Installer (construction); Tuyere Fitter (steel & rel.).  
*GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 88*



### 87502A Pipe Fitters

**Definition** Lay out, assemble, install, and maintain pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems.

#### Tasks

1. Plans pipe system layout, installation, or repair according to specifications.
2. Cuts, threads, and hammers pipe to specifications, using tools such as saws, cutting torches, and pipe threaders and benders.
3. Attaches pipes to walls, structures and fixtures, such as radiators or tanks, using brackets, clamps, tools or welding equipment.
4. Modifies and maintains pipe systems and related machines and equipment components following specifications, using hand tools and power tools.
5. Selects pipe sizes and types and related materials, such as supports, hangers, and hydraulic cylinders, according to specifications.
6. Measures and marks pipes for cutting and threading.
7. Assembles pipes, tubes, and fittings, according to specifications.
8. Inspects, examines, and tests installed systems and pipe lines, using pressure gauge, hydrostatic testing, observation, or other methods.
9. Lays out full scale drawings of pipe systems, supports, and related equipment, following blueprints.
10. Inspects work site to determine presence of obstruction and ensure that holes will not cause structure weakness.
11. Coats nonferrous piping materials by dipping in mixture of molten tin and lead to prevent erosion, or galvanic and electrolytic action.
12. Cuts and bores holes in structures, such as bulkheads, decks, walls, and mains, using hand and power tools, prior to pipe installation.
13. Turns valve to shut off steam, water, or other gases or liquids from pipe section, using valve key or wrenches.
14. Operates motorized pump to remove water from flooded manholes, basements, or facility floors.