

Pipefitter/Steamfitter

Pipefitters work from blueprints to determine the types and placement location of piping, valves, and fixtures to be installed. Pipefitters assemble, install, and maintain pipes to carry liquids, steam, compressed air, gases, and fluids needed for processing, manufacturing, heating, and cooling. They must be able to change and repair pipe systems and do all types of pipe welding. They measure, cut, bend, and thread pipes, joining sections together as necessary using elbows, "T" joints, or other couplings. Pipefitters install and repair high pressure pipe systems, especially in industrial and commercial establishments. After a pipe system is installed, pipefitters check for leaks by forcing liquid steam or air through it under pressure. Tools used include wrenches, reamers, drills, hammers, chisels, saws, gas torches, gas or electric welding equipment, pipe cutters, benders, and threaders.

Working Conditions

Pipe work is active and sometimes strenuous. The work is subject to hot and cold temperatures and fumes. Frequently it is necessary to stand for prolonged periods on ladders or on scaffolds. Occasionally pipefitters must operate in cramped or uncomfortable positions. The work may be indoors or outdoors in unfinished sections of new buildings.

Aptitude and Interest

Applicants should be able to understand detailed written and verbal instructions. They must enjoy working with their hands and working outdoors. Also, they must be able to solve arithmetic problems quickly and accurately.

Training

To become a skilled pipefitter training is essential. It can be acquired informally through "learning-by-workin;" through company on-the-job training programs; by attending trade or vocational/ technical schools; through unilaterally (management or labor) sponsored trainee programs; through registered labor-management apprenticeship programs, or a combination of the above. It is generally accepted that the more formalized training programs give more comprehensive skill training. Recommended high school courses include English, general math, algebra, geometry, trigonometry, general science, physics, and mechanical drawing.