

PIPE FITTER

RAPIDS: 0414D

O*NET/SOC: 47-2152.01

REVISION DATE: 09/2019

TRADE DESCRIPTION: Lay out, assemble, install, or maintain pipe systems, pipe supports, or related hydraulic or pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, or industrial production or processing systems.

TASK PERFORMANCE: Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following skill areas. Actual work time must be recorded in the Work Experience Log; each skill area must be completed.

Applicable Ratings/MOS/NEC

USMC MOS: 1169, 1171

USCG: None

USN: HT, UT

USA MOS: 12K

Related Instruction:

Trade related On-The-Job-Training (OJT) or Any Trade related schools/courses totaling 432 or more hours.

Additional Requirement:

None.

Total Hours: **6000**

Skill	Description	Hours
A	PRE-PLANNING INSTALLATION	1000

	<ul style="list-style-type: none"> -- Lay out full scale drawings of pipe systems, supports, or related equipment, according to blueprints. -- Plan pipe system layout, installation, or repair, according to specifications. -- Inspect work sites for obstructions or holes that could cause structural weakness. -- Select pipe sizes, types, related materials, such as supports, hangers, or hydraulic cylinders, according to specifications. -- Measure and mark pipes for cutting or threading. 	
B	<p>INSTALLATION AND ASSEMBLY</p> <ul style="list-style-type: none"> -- Cut, thread, or hammer pipes to specifications, using tools such as saws, cutting torches, pipe threaders, or pipe benders. -- Assemble or secure pipes, tubes, fittings, or related equipment, according to specifications, by welding, brazing, cementing, soldering, or threading joints. -- Attach pipes to walls, structures, or fixtures, such as radiators or tanks, using brackets, clamps, tools, or welding equipment. -- Cut or bore holes in structures, such as bulkheads, decks, walls, or mains, prior to pipe installation, using hand or power tools. -- Install automatic controls to regulate pipe systems. -- Remove and replace worn components. -- Inspect work sites for obstructions or holes that could cause structural weakness. -- Install fixtures, appliances, or equipment designed to reduce water or energy consumption. -- Install pipe systems to support alternative energy-fueled systems, such as geothermal heating and cooling systems. -- Install or test gray water systems, such as recycling, treatment, or irrigation systems. -- Fill pipes with sand or resin to prevent distortion, and hold pipes during bending and installation. 	3500
C	<p>MAINTENANCE OF PIPE SYSTEMS</p> <ul style="list-style-type: none"> -- Modify, clean, or maintain pipe systems, units, fittings, or related machines or equipment, using hand or power tools. -- Inspect, examine, or test installed systems or pipe lines, using pressure gauge, hydrostatic testing, observation, or other methods. 	1500

	<ul style="list-style-type: none">-- Operate motorized pumps to remove water from flooded manholes, basements, or facility floors.-- Inspect work sites to identify potential environmental or safety hazards.-- Immerse pipe in chemical solution to remove dirt, oil, and scale.-- Clean and renew steam traps.	
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