

SHIPFITTER

RAPIDS: 0513D

O*NET/SOC: 51-4192.00

REVISION DATE: 09/2019

TRADE DESCRIPTION: Lay out reference points and dimensions on metal or plastic stock or workpieces, such as sheets, plates, tubes, structural shapes, castings, or machine parts, for further processing. Includes Shipfitters.

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: None

USCG: None

USN: HT

USA MOS: None

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-FABRICATION PLANNING	2000

	<ul style="list-style-type: none"> -- Plan and develop layouts from blueprints and templates, applying knowledge of trigonometry, design, effects of heat, and properties of metals. -- Mark curves, lines, holes, dimensions, and welding symbols onto workpieces, using scribes, soapstones, punches, and hand drills. -- Compute layout dimensions, and determine and mark reference points on metal stock or workpieces for further processing, such as welding and assembly. -- Plan locations and sequences of cutting, drilling, bending, rolling, punching, and welding operations, using compasses, protractors, dividers, and rules. -- Design and prepare templates of wood, paper, or metal. -- Add dimensional details to blueprints or drawings made by other workers. 	
B	<p>FABRICATE AND INSTALL</p> <ul style="list-style-type: none"> -- Fit and align fabricated parts to be welded or assembled. -- Lay out and fabricate metal structural parts such as plates, bulkheads, and frames. -- Lift and position workpieces in relation to surface plates, manually or with hoists, and using parallel blocks and angle plates. -- Brace parts in position within hulls or ships for riveting or welding. -- Install doors, hatches, brackets, and clips. -- Locate centerlines and verify template positions, using measuring instruments such as gauge blocks, height gauges, and dial indicators. 	3000
C	<p>FINISHING AND INSPECTION</p> <ul style="list-style-type: none"> -- Inspect machined parts to verify conformance to specifications. -- Apply pigment to layout surfaces, using paint brushes. -- Apply protective or decorative finishes to workpieces or products. -- Inspect metal, plastic, or composite products. 	1000