

WELDER

KIND OF WORK

Skilled welding work.

NATURE AND PURPOSE

Under general supervision, an employee in this class performs skilled welding work in the fabrication and repair of machinery and equipment. An employee in this class may train and direct the work of other laborers and lesser-skilled maintenance employees. Performs related work as required.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Monitors and reports on the work activities of lesser-skilled laborers and other maintenance employees to ensure the timely completion of welding projects by determining the most efficient work procedures and techniques; by instructing others on the appropriate use of equipment and welding techniques; by inspecting the quality of the work performed by others; and by recording hours worked, materials and equipment used.

Reviews drawings, sketches and specifications to understand the scope of the project and to recommend changes by reading the drawings and specifications and discussing them with the supervisor; by drafting new or more complete designs for the fabrication of machinery and equipment, parts and accessories; by researching the plans and specifications of previously completed welding and metal fabrication projects; by laying out the final details of the project.

Completes cost estimates for time, labor and materials so that the supervisor can prioritize, budget and schedule the equipment and machinery fabrication and repair projects by determining the quantity of steel, cast iron, and other metals necessary to complete the project; by selecting the best work procedures; by determining the equipment and labor requirements; and by requisitioning the necessary supplies, materials and equipment.

Repairs and fabricates metal equipment, machinery, and steam, water and refrigeration lines to complete welding and metal fabrication projects by selecting the necessary equipment and materials; by cutting, heating, and welding broken aluminum, cast iron, steel, and white metal machine parts, castings and equipment; by forging, shaping, sharpening, tempering iron and steel parts for machinery and equipment; by welding all types of joints on steam, water, and refrigeration lines from various positions (flat, vertical, horizontal and overhead) and by complying with all safety procedures and standards to prevent injuries.

Maintains welding and metal fabrication hand and power tools to insure there is safe and efficient operation by inspecting the equipment daily and weekly; by replacing worn parts; by repairing or arranging for the repair of damaged or broken equipment.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Plans, shop drawings and specifications sufficient to interpret, draft, modify, and follow them to complete metal repair and fabrication welding projects.

The properties of metals and alloys sufficient to weld, cut, braze, and heat these metals to repair and fabricate equipment, machinery, parts and accessories.

Welding practices and techniques including the inspection of steel, cast iron, and other metals sufficient to fabricate and repair metal equipment, parts, and accessories.

Welding equipment safety standards and procedures sufficient to prevent injuries.

Shop math sufficiently to estimate labor and material costs for planned welding projects.

Skill in:

The operation of hand and power welding and metal fabrication related tools and equipment sufficient to repair and fabricate metal equipment, machinery, parts, and accessories.

Ability to:

Maintain and repair hand and power tools sufficient to insure their availability and safe operation for welding projects.

Instruct and monitor the welding and metal fabrication work of lesser-skilled employees sufficient to train and direct them during the length of the project.

Maintain welding and metal fabrication project records of time and materials sufficient to report daily, weekly, and monthly progress of the welding project.

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T.C.:
Former Title(s):