

WELDER II

PURPOSE AND NATURE OF WORK

Work requires the application of a wide variety of trade skills including acetylene and arc welding, brazing, and metal cutting jobs on ferrous and non-ferrous metals. It is distinguished from that of the class of Welder I in that the employee is required to make welds on plates, shells, tubes, drums and structures to modify or repair boilers, pressurized pipes or vessels, and vacuum tanks. Welds must be of superior quality to withstand great stress from operation of equipment. The employee exercises independent judgment as to welding methods used. Assignments are also received in a variety of other maintenance duties, mechanical work and related shop work. May work on-call on a rotation basis. Occasionally, the employee exercises general supervision over the work of helpers. All work is subject to review by a superior for compliance with standard procedures and specifications either while in progress or on completion.

ILLUSTRATIVE EXAMPLES OF WORK (Note: These examples are intended only to illustrate the various types of work performed by incumbents in this class. All of the duties performed by any one incumbent may not be listed, nor does any incumbent necessarily perform all of these duties.)

Preheats and cleans metals; lays out, cuts, and fits materials for welding; selects proper welding heat and proper type and size of electrodes for correct penetration and strength of welded materials. Welds and repairs steam turbines, boilers and high-pressure vessels. Fabricates special apparatus for general operational purposes. Maintains and makes minor repairs to welding equipment. Performs a variety of maintenance and repair tasks on structures, equipment and machinery. Performs related work as required.

NECESSARY KNOWLEDGES, ABILITIES, AND SKILLS

Considerable knowledge of the methods, materials, tools, and practices of the welding trade and of general maintenance and repair work, particularly in the operational area to which assigned.

Considerable knowledge of the properties of ferrous and non-ferrous metals encountered in welding work.

Knowledge of the occupational hazards and safety precautions of the trade.

Knowledge of shop arithmetic.

Ability to make welds on boilers and high-pressure vessels which can pass tests for certification.

Ability to understand and follow oral and written instructions and to read and work from sketches, diagrams, blueprints, and broken parts.

Ability to establish and maintain effective relationships with superiors and other employees.

Skill in the use and care of the tools and equipment common to the welding trade and maintenance and repair.

DESIRABLE TRAINING AND EXPERIENCE

Graduation from high school, supplemented by courses in welding; considerable experience as a journeyman welder, including experience in performing varied maintenance and repair tasks at the level of Welder I; or any equivalent combination of training and experience.