

STRUCTURAL WELDER, 3791

Summary of Duties : Does skilled field welding and cutting of structural and reinforcing steel at various heights using either acetylene or electric welding equipment; and does related work.

Distinguishing Features : The work of a Structural Welder is distinguished from that of a Welder in that the primary responsibility of the former is to weld structural and reinforcing steel members. Assignments are received in the form of blueprints, sketches, and verbal instructions normally indicating materials and general work methods. Little supervision is exercised over the details of work execution. However, the work is subject to supervisory review and inspection by authorized inspectors as a check on the quality of the work. A Structural Welder usually is assisted by helpers. An employee of this class frequently works in overhead and other awkward positions and may perform welding at various heights, including working from structural steel or scaffolds. Hazards of the work include danger of eye injury from the glare of the arc, possibility of electric shock, burn, injuries from gas explosions, danger of breathing toxic fumes, and dangers arising from work in hazardous places in the field.

Examples of Duties : Lays out, cuts, and fits material for welding; welds beams, structural members, and reinforcing steel; makes and uses simple templates; cleans and heats metals; sets up, regulates, maintains, and makes minor repairs to welding equipment; occasionally sets up and operates a heli-arc welding machine; cleans, peens, and grinds completed welds; keeps records of time and materials for various jobs; and may occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

Qualifications : A good knowledge of the operation, adjustment, care, and minor repair of acetylene and electric welding and cutting equipment, together with skill in cutting, welding, and brushing and grinding welds; a good knowledge of the types of welds, joints, and welding rods used in structural welding; a good knowledge of the standard graphic symbols related to welding; a good knowledge of the metals usually welded and their preparation for welding, their behavior under the arc or flame, and treatments necessary to secure sound welds; a good knowledge of the hazards and safety practices involved in welding; a working knowledge of inert gas welding; a working knowledge of the fabrication and use of templates; a working knowledge of structural steel erection and welding without the aid of scaffolds; a general knowledge of oxy-arc cutting; the ability to estimate the temperature of ferrous metal by its color; the ability to read and interpret blueprints and drawings; the ability to lay out and set up work; the ability to hang floats and needle beam scaffolding; and the ability to make routine estimates of time and materials, keep routine records, and make reports.

Attainment of journey-level rank as a welder, and a valid structural steel field welder's certificate issued by the Los Angeles City Department of Building and Safety, are required for Structural Welder.

License : A valid California driver's license may be required.

Physical Requirements : Strength to perform average lifting up to 70 pounds and occasionally over 70 pounds; body agility and equilibrium involved in activities such as climbing and balancing under precarious conditions; arm, hand and finger dexterity with at least one hand involved in activities such as reaching, handling, and feeling.

Persons with handicaps may be capable of performing the duties of some of the positions in this class. Such determination must be made by the medical examiner on an individual basis.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.