

Career Service Authority
Equipment Repair Technician

Revised Date
Revised By Shirley Nikkel
FLSA Code Non-Exempt
Est. Date 09/16/95

General Statement of Duties

Operates electric and gas welding equipment in the fabrication and repair of metal structures, equipment, and machinery.

Essential Duties and Knowledge, Skill, and Ability Requirements

1. Fabricates, repairs, modifies and installs various types of metal structures and equipment using standard welding practices. Prepares surfaces for welding.
 - *Skill in using gas and electric welding equipment.*
2. Works from sketches or develops plans and designs for maintenance and repair work.
 - *Skill in interpreting work sketches to complete an assignment.*
 - *Skill in recognizing non-standardized situations and preparing recommendations for problem resolution.*
3. Lays out, heats, bends, cuts, welds, heliarc and brazes ferrous or nonferrous metals.
 - *Knowledge of ferrous and nonferrous metal properties sufficient to be able to identify the type of metal to be repaired.*
 - *Knowledge of the basics of gas and arc welding sufficient to be able to perform welding work normally required in mechanical, structural repairs and fabrication of parts.*
4. Cuts metal with oxi-acetylene torch or plasma cutter.
 - *Skill in using hand tools and equipment common to maintenance and repair work.*
5. Estimates materials, labor and equipment costs.
 - *Skill in estimating the cost of materials and equipment.*

6. Maintains records and prepares reports.
 - *Skill in maintaining and organizing files, records and documents.*
7. Assists other skilled trades employees as needed.
 - *Skill in operating hand and power tools and equipment common to several maintenance and repair trades.*
 - *Skill in exercising initiative, judgment and decision making in solving problems and meeting organizational objectives.*
 - *Skill in independently adapting, interpreting, and applying written guidelines, precedents, and standardized work practices to a variety of unprecedented and problematic situations.*
8. Some positions participate in snow removal duties as assigned.
 - *Skill in using a variety of snow removal equipment.*
9. Some positions may maintain a shop inventory for welding supplies and materials.
 - *Knowledge of inventory techniques sufficient to be able to maintain adequate levels of supplies.*
10. Some positions may operate heavy equipment in connection with their assigned duties.
 - *Skill in using heavy equipment to complete an assignment.*
11. Observes all common safety practices.
 - *Knowledge of safety hazards and necessary safety precautions sufficient to be able to establish a safe work environment for self and others.*
12. Performs other related duties as assigned or requested.

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Any one position may not include all of the duties listed. However, the allocation of positions to this class will be determined by the amount of time spent in performing the primary duties listed above.
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Job Requirements

Level of Supervision

May perform lead work on a job by job or rotating basis.

Guidance and Decision Making

Guidelines are generally numerous, well established, and directly applicable to the work assignment. Work assignment and desired results are explained by general oral or written instructions. Duties assigned are generally repetitive and restricted in scope but may be of substantial intricacy. Employee is primarily concerned with the application of standardized practices. Decision or recommendations on non-standardized situations are limited to relating organizational policies to specific cases. Problems which are not covered by guidelines or are without precedent are taken up with the supervisor. Work is reviewed for adherence to instructions, accuracy, completeness, and conformance to standard practice or precedent. Recurring work clearly covered by guidelines may or may not be reviewed.

Interpersonal Communications

Contacts with the public or employees where factual information relative to the organization or its functions is received and relayed, or a service rendered, according to established procedures or instructions.

Physical Demands

Standing: remaining on one's feet in an upright position.

Lifting: raising or lowering an object from one level to another.

Carrying: transporting an object, usually by hand, arm, or shoulder.

Pushing: exerting force upon an object so that the object is away.

Balancing: maintaining body equilibrium to prevent falling over.

Stooping: bending the body by bending spine at the waist.

Kneeling: bending legs to come to rest on one or both knees.

Crouching: bending body downward and forward by bending legs.

Reaching: extending the hand(s) and arm(s) in any direction.

Handling: seizing, holding, grasping, or otherwise working with hands.

Fingering: picking, pinching, or otherwise working with fingers.

Feeling: perceiving attributes of objects by means of skin receptors.

Talking: expressing or exchanging ideas by means of spoken words.

Hearing: perceiving the nature of sounds by the ear.

Repetitive motions: Making frequent movements with a part of the body.

Eye/hand/foot coordination: performing work through using two or more.

Physical Strength

Lifting: Raising or lowering an object up to 10 pounds.

Vision Requirements

Far acuity: ability to see clearly at 20 feet or more.

Near acuity: ability to see clearly at 20 inches or less.

Depth Perception: ability to judge distance and space relationships.

Field of Vision: ability to see peripherally.

Accommodation: ability to adjust vision to bring objects into focus.

Color Vision: ability to distinguish and identify different colors.

Mental Demands

Mathematical reasoning

Memorization

Oral Comprehension

Spatial Orientation

Environmental Conditions

Extreme Heat: temperature hot enough to cause marked bodily discomfort

Noise: sufficient noise to cause distraction or possible hearing loss.

Hazards: conditions where there is danger to life, body, and/or health.

Atmospheric Conditions: conditions that affect the skin or respiratory system.

Minimum Education

Graduation from high school or possession of a GED certificate desired.

Minimum Experience

Three years of journey level welder experience in gas and electrical welding in the maintenance and repair of equipment.

Equivalency

Completion of a welding apprenticeship in gas and electric welding in all positions, on ferrous and nonferrous metals may be substituted for one year of the minimum experience.

Licensure and Certification

Some positions may require a Colorado Commercial Driver's License Class "B" within ninety days of appointment. Possession of a valid Colorado Class "R" Driver's License at the time of application.