

Industrial Machinist

ELSA Status: Covered
Bargaining Unit: Portland City Laborers 483 (PCL)

General Summary

Positions in this broad class fabricate a variety of metal parts, equipment and apparatus using machine shop tools and/or computerized machine applications to repair machinery and mechanical equipment.

Industrial Machinist - 30000126

Distinguishing Characteristics

This is a single level class, which typically fabricates and repairs parts, equipment and apparatus from watch sized components up to large industrial pieces. It is distinguished from other classes by its requirement to perform a wide range of custom machining requiring precision tolerances, and by the requirement to design and build modifications to equipment. It is distinguished from mechanic classifications by its focus on fabrication using machine tools. It is similarly distinguished from Industrial Maintenance Millwright, which repairs, installs and operates wastewater treatment facilities, equipment and structures.

Typical Duties/Examples of Work

1. Sets up and operates lathes, shapers, planers, milling machines, grinders, torches, welders, hand tools and drill presses to cut and shape parts.
2. Fabricates and repairs a wide variety of parts and apparatus using detailed drawings, verbal descriptions, sample parts and plans; designs and fabricates tools and fixtures as necessary to facilitate work.
3. Dismantles, repairs, reassembles and aligns machinery, devices, apparatus and mechanical equipment.
4. Evaluates and determines best and most effective method for fabricating or repairing parts, equipment and apparatus.
5. Performs a variety of preventative maintenance and testing of equipment; monitors equipment function, inspects devices, and maintains documentation.
6. May train personnel in proper use and functioning of equipment.

7. Responds to major alarms that support breathing air systems and self-contained Breathing Apparatus if assigned to Fire Bureau.
8. Determines best method and cost effectiveness to repair replace or manufacture replacement component parts for various pieces of industrial equipment.
9. Plans all aspects of work; determines and requisitions appropriate materials.
10. Coordinates with work groups to design and/or build modifications to existing equipment; serves as technical advisor and provides machinist expertise.
11. Performs related duties as assigned.

Required Knowledge, Skills and Abilities

Knowledge of: machine shop equipment, tools, apparatus and terminology; methods of appropriately machining metals and alloys; safety hazards and safe operations of machine shop equipment, including use of personal protective equipment; fabrication, repair and maintenance of specialized apparatus and devices

Ability to: communicate effectively; establish and maintain effective interpersonal relationships with a diversity of others

Skill in: reading, interpreting and applying blueprints and drawings; working from verbal descriptions; troubleshooting, diagnosis and repair; machining mathematics; planning, laying out and performing the full range of manually and/or computerized manufactured parts with fine precision tolerances; cost/benefit analysis; design and modification of equipment.

Special Requirements

Journey Machinist Classification or demonstrated equivalent skills and experience; valid state driver’s license; some positions may require additional endorsements, certifications, and/or licenses.

Classification History:

Adopted: 2-03-99:

Class created as a result of DCTU Classification and Compensation Study 1998-99. This class is composed of the following classes:

1520 Maintenance Mechanic Adopted: 04-20-76

Revised: 09-20-94 (updated class specification)

Revised: 03-02-06 (Updated class spec to reflect change in certifications and use of computerized machine applications.)

June 2009 - Change Job Class number from 1520 to 30000126, due to system change.

7-1-17 - Union changed from DCTU to PCL

Working Conditions

Work in this class is typically performed in a shop environment; performed in a field environment. Incumbent is typically required to lift up to 50 pounds; is exposed to hazardous equipment, chemicals and fumes; is exposed to high noise levels from shop equipment.