

Class Concept

Positions in this class operate machine tools to fabricate, modify, and repair a variety of metal parts to precise dimensions. Work requires the use of tools such as lathe, drill press, milling machine, boring mill, and shaper. Positions study specifications and diagrams and measure parts with micrometers and calipers in order to determine accuracy of cuts. Positions fabricate from rough stock various parts for machines and assemblies. Positions fuse together metal parts by using electric or oxyacetylene welding torches; shapes stock into desired angles by forging and annealing. Work is performed at the journeyman level in accordance with standard machine shop practices. Positions function with considerable independence in the selection of methods, procedures, and materials.

Recruitment Standards

Knowledge, Skills, and Abilities

- Working knowledge of the principles and operation of various machine tools such as lathes, drill presses, shapers, milling machines, boring bars, dividing heads and grinders.
- Working knowledge of the properties of common metals and alloys.
- Working knowledge of precise measuring scales and the uses of measuring instruments such as vernier, inside and outside calipers, and micrometers.
- Basic knowledge of sheet metal operation and fabrication.
- Ability to perform various welding techniques.
- Ability to read and understand blueprints, technical diagrams, and sketches of complex equipment.
- Ability to interpret and carry out instructions.

Minimum Education and Experience

High school or General Educational Development (GED) diploma and one year of progressive experience in the operation of a variety of machine shop equipment in the production of metal parts; or an equivalent combination of education and experience.