

MACHINE SHOP

TOOL MAKER

BASIC WORKER FUNCTION:

Based on the specific project, analyzes variety of specifications, lay out metal stock, materials needed for project, sets up and operates machine tools, and fits and assembles parts to produce or repair prototypes, tools, jigs, fixtures, gauges, or hand tools for all departments as assigned, applying knowledge of prototype or tool design and layout, shop mathematics, metal properties, characteristics of materials to be used and layout, machining and assembly procedures required.

ADDITIONAL GENERAL DESCRIPTION OF TASKS:

Studies specifications such as blueprint, sketch, or verbal description and plans sequence of achieving job completion. Requisitions/orders/obtains materials to be used. If necessary requisitions parts from other company departments or outside vendors. Sets up and operates machines and equipment to produce parts to meet requirements of project and verifies conformance of parts to specifications. Fits and assembles parts into assemblies or mechanisms using hand and power tools. Verifies dimensions and alignment using measuring tools. May heat treat tools or parts. May examine standard tools or parts to determine modifications to be made. Develops specifications from general descriptions and making drawing or sketch of prototype part, tool or fixture to be made. Makes modifications as required. Changes tools when necessary. Grinds and sharpens tool bits. Cleans and maintains machines and equipment used.

Trains other workers. Serves as consultation resource with other workers. Observes all safety regulations. Other duties as required.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Ability to create prototypes, tools, jigs, fixtures and gauges from blueprints, sketches and verbal descriptions.

Ability to set up and run all machines and equipment required to produce what is required.

Ability to keep current with technology necessary to perform job more effectively as technology evolves.

Intellectual ability to analyze data and think conceptually and creatively.

Sophisticated knowledge of characteristics of materials.

Sophisticated knowledge of machining operations, machining procedures and techniques.

Sophisticated knowledge of materials used in the helicopter product.

Sophisticated knowledge of metal properties.

Ability to read blueprints and specifications on a sophisticated level.

Ability to use various sophisticated measuring tools and devices.

Ability to grind and sharpen tools.

Ability to use shop mathematics on a complex level including trigonometry.

*Also must be able to meet personal tool requirements.