

HTT Inc.
Tool & Die Job Description

The Tool & Die position will analyze specifications, lay out metal stock, set up and operate machine tools, and fit and assemble parts to make and repair dies, cutting tools, jigs, fixtures, gauges, and machinists' hand tools.

This list of duties and responsibilities is not all-inclusive and may be expanded to include other duties and responsibilities:

- Conduct test runs with completed tools or dies to ensure that parts meet specifications, making adjustments as necessary
- Cut, shape, and trim blanks or blocks to specified lengths or shapes, using power saws, power shears, rules, and hand tools
- Design jigs, fixtures, and templates for use as work aids in the fabrication of parts or products
- File, grind, shim, and adjust different parts to properly fit them together
- Fit and assemble parts to make, repair, or modify dies, jigs, gauges, and tools, using machine tools and hand tools
- Inspect finished dies for smoothness, contour conformity, and defects
- Lift, position, and secure machined parts on surface plates or worktables, using hoists, vises, v-blocks, or angle plates
- Measure, mark, and scribe metal or plastic stock to lay out machining, using instruments such as protractors, micrometers, scribes, and rulers
- Select metals to be used from a range of metals and alloys, based on properties such as hardness and heat tolerance
- Set pyrometer controls of heat-treating furnaces and feed or place parts, tools, or assemblies into furnaces to harden
- Set up and operate conventional or computer numerically controlled machine tools such as lathes, milling machines, and grinders to cut, bore, grind, or otherwise shape parts to prescribed dimensions and finishes
- Visualize and compute dimensions, sizes, shapes, and tolerances of assemblies, based on specifications
- Verify dimensions, alignments, and clearances of finished parts for conformance to specifications, using measuring instruments such as calipers, gauge blocks, micrometers, and dial indicators
- Study blueprints, sketches, models, or specifications to plan sequences of operations for fabricating tools, dies, or assemblies
- Smooth and polish flat and contoured surfaces of parts or tools, using scrapers, abrasive stones, files, emery cloths, or power grinders
- Set up and operate drill presses to drill and tap holes in parts for assembly