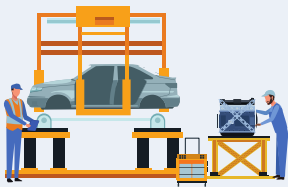


Tool and Die Makers



Tool and Die Makers work on metals, alloys and other materials, impacting the work of countless sectors where custom tools, structures, and components are required. Through the creation of moulds, dies, jigs and fixtures, they enable manufacturing establishments to scale production by employing those tools to replicate produced work pieces to a great degree of accuracy. With work ranging from transportation to electrical equipment and tool manufacturing, tool and die makers are crucial skilled trade workers in modern industries.

Where do Tool and Die Makers work?



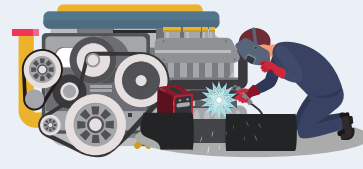
Vehicle Assembly and Body Parts Manufacturing



Aerospace Manufacturing Industry



Machine Shops



Machinery Repair and Manufacturing Industry



Forges and Foundries

What do Tool and Die Makers do?

Custom work piece fabrication requires a great deal of accuracy, as flaws in moulds can result in repeated faults during production. Tool and Die Makers use precision electronic and analog measuring devices in conjunction with metal shaping equipment to carefully craft components and tools for manufacturing.

- Set up, operate and maintain a variety of conventional and computer numerically controlled (CNC) machine tools to cut, turn, mill, plane, drill, bore, grind or otherwise shape workpiece to prescribed dimensions and finish
- Prepare templates and sketches, and determine work processes
- Read and interpret engineering drawings and specifications of tools, dies, prototypes or models
- Verify machined parts for conformance to specifications using tools such as verniers, callipers, micrometers, coordinate measuring machines (CMM) and electronic measuring devices

Career pathways & potential earnings of Tool and Die Makers

Tool and Die Makers can progress to other roles and positions:

Tool and Die Maker



Tool and Die Makers can earn wages ranging from \$19/hr to \$42/hr. Experience in this or machining is usually required to become a metal trade supervisor

Metal Forming Trades Supervisor



Metal forming trade supervisors monitor the activities trades such as welders, to machining tool operators and can make up to \$49/hr.

Manufacturing Managers



Manufacturing Managers oversee the day to day operations of a production line or facility. They can earn up to \$72/hr.

Tool and Die Makers can also apply their skills and expertise in other occupations such as the following:

- Patternmakers - textile, leather and fur products
- Machinists and machining and tooling inspectors

How do I become a Tool and Die Maker?

There are several educational, licensing and training requirements to become a Tool and Die Maker. Some requirements may vary by province or company. Below are the most commonly required qualifications to work as a Tool and Die Maker:

- **Minimum Education:** Usually requires completion of secondary school.
- **Certification and Licensing:** Certification is available, but optional, after a four-to-five year tool and die making apprenticeship program or a mix of over five years work experience and some industry, college or high school courses in tool and die making. Some companies may require certification as a condition of employment.



What are the most important skills to have as a Tool and Die Maker?

Accuracy and detail-orientation is of critical importance in tool and die making. Tool and Die Makers must have strong mathematical, material science knowledge as well as design skills to understand, create and translate blueprints into physical products. Operating tools and equipment requires fine motor skills and physical dexterity so that accuracy can be maintained.

Technical Knowledge and Skills

- Mechanics and Machinery
- Computer-Aided Design and Computer-Aided Manufacturing (CAD/CAM) Software
- Technology Design
- Computer Numerically Controlled (CNC) Systems
- Equipment Selection
- Mathematics

Soft Skills

- Critical Thinking
- Arm-Hand Steadiness
- Visualization
- Inductive & Deductive Reasoning
- Judgement and Decision Making

Future of Tool and Die Making in Canada


Tool and Die Makers are an in-demand skilled trade in Canada. In 2021, more than 9,000 were employed across Canada's sectors and industries. FOCAL projects job openings for Tool and Die Makers in Canada's automotive manufacturing sector between 2021 and 2030 to exceed 10% of 2021 employment, at roughly 940 openings. FOCAL also forecasts that during the same period, more than 850 workers are needed to fill recruitment gaps in the sector.



Learn more about the job market for Tool and Die Makers, as well as about many other developments and new technologies in Canada's automotive manufacturing by visiting our website futureautolabourforce.ca.

You can also check our social media by following these links:

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