

INDUSTRIAL

NOC 9511

TOOL AND DIE MAKERS (A.C.A., non-restricted certified trade)



WORK DESCRIPTION

What would I be doing?

Tool and Die Makers are machinists who:

- read and interpret drawings, and specifications of tools, dies, prototypes or models,
- compute tolerances and set up machines,
- cut, turn, mill, plane, bore, grind or otherwise shape and finish metal to make tools and dies used in all parts of manufacturing,
- perform surface measurements and calculations on completed tools, dies, jigs and fixtures and verifies for conformance to specifications using precision measuring instruments,
- Machine, fit and assemble parts and castings to make metal moulds for plastic injection moulding.

Tool and Die Makers work indoors, usually in industrial settings that may be noisy and potentially hazardous. The work is often repetitive but CNC machines are used to perform long production runs.

Shift work is not unusual and a five day work week of 40 hours is standard.

PLACE OF WORK

Who needs a Tool and Die Makers?

- manufacturing and stamping industries,
- tool and die and machine shops,
- mould making shops,
- some Tool and Die Makers are self-employed but most work for a company.

CONDITIONS OF WORK

A Tool and Die Maker is a non-restricted certified trade. A person may or may not have a valid Certificate of Qualification but registration as an apprentice is recommended to work in the trade. A Cooperative Education student, who is not a signed apprentice, does not have to be paid. An apprentice **may** be paid wages.

SALARIES/WAGES

The salary depends on the employer, years of experience, and level of training. In unionized places the wages and conditions of work are negotiated collectively.

In the Elgin, Middlesex and Oxford area, Tool and Die Makers can earn \$10.90 - \$ 18.54 per hour, averaging \$ 15.92 per hour.

(Next)

PROSPECTS of EMPLOYMENT in the Elgin, Middlesex and Oxford area

RATING: *good*

Employers report difficulties in finding qualified workers to fill vacant positions. Many job openings will be created yearly from the need to replace workers who retire.

APPRENTICESHIP IN THE TOOL AND DIE MAKER TRADE

- takes about 4 years or 8 000 h, including 720 h of in-school training; prior education and experience may shorten the time to complete all the competencies,
- a Certificate of Apprenticeship is issued upon completion of apprenticeship,
- must pass the Certificate of Qualification exam to receive a Certificate of Qualification with journeyman status,
- offers (optional) an Interprovincial Trade Certification (Red Seal).

In-School Education:

An OYAP student must be 16 years old and completed Grade 10 (or equivalent). Otherwise, all apprenticeship applicants must successfully complete Grade 12 (OSSD) or equivalent. The following competencies are valuable:

English, Computers, *Communication and*
Mathematics, *analytical skills,*
Physics, *dexterity and ability*
Manufacturing *to visualize*
(Machining) *multi-dimensions,*
Design Technology (Drafting).

OYAP students must be full-time students in high school and those who obtain apprenticeships will complete the apprenticeship curriculum in college or an approved Training Delivery Agent.

Specific skills learned in school are: safety, applied trade calculations, engineering drawings/layout development, stamping, milling technology, NC/CNC technology.

On the Job Training

- As a high school Cooperative Education credit (towards O.S.S.D.), learning is connected to one of the school subjects.
- The Apprentices must follow a program in the **Apprenticeship Training Standards** book which is given to them in the workplace when they register. As each competency is achieved the employer signs it off.

OPPORTUNITY TO GROW

A Certificate as a journeyman is not required to start working as a Tool and Die Maker but an apprenticeship is recommended. After that, a Tool and Die Maker may:

- become a foreperson or a supervisor,
- start own business as a contractor,
- work in related areas or occupations.

RELATED OCCUPATIONS

- Automotive Machinist,
- Machined Parts Inspector,
- Tooling Inspector.

CONTACT INFORMATION

Whom should I call?

School Guidance/Co-Op Office
Apprenticeship Office 519 675 7788
London: 1 800 265 1050
Apprenticeship web: www.edu.gov.on.ca
EMOLTB web site: www.localboard.on.ca
Training Hotline: 1 800 387 5656
Union: