

INDUSTRIAL

NOC 7231

GENERAL MACHINIST (A.C.A., non-restricted certified trade)



but most work for a company.

WORK DESCRIPTION

What would I be doing?

Machinists:

- cut, shape and finish metal to make machine components used in all parts of manufacturing,
- Set up and operate precision metal cutting machines,
- plan and prepare for the machine process,
- perform surface measurements and calculations, read engineering drawings,
- work with machines, motor vehicles, automotive parts, and aircraft.

Machinists work indoors, usually in industrial settings that may be noisy and potentially hazardous. The work often involves lifting and carrying heavy objects. There is a lot of standing while the machine is working. 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 35 to 40 hours is standard.

PLACE OF WORK

Who needs a Machinist?

- manufacturing companies,
- machine shops,
- some machinists are self employed

CONDITIONS OF WORK

A machinist is a non-restricted certified trade.

A person may or may not have a valid Certificate of Qualification to work in the trade. A registration as an apprentice is recommended. 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,
General Machinists can earn
\$ 14.83 - \$ 19.96 per hour, averaging
\$ 18.57 per hour.***

(Next)

PROSPECTS of EMPLOYMENT in the Elgin, Middlesex and Oxford area

RATING: good

Employers across Ontario have reported difficulties in finding skilled workers. Some are recruiting outside Canada.

APPRENTICESHIP IN THE MACHINIST TRADE

- takes 3 to 4 years or about 8 000 h, including 720 h of in-school training; prior education and experience may shorten the time to complete all the competencies,
- upon completion of apprenticeship a Certificate of Apprenticeship is issued but apprentices 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, *Communication and*
Mathematics, *planning skills,*
Physics, *problem-solving skills*
Manufacturing Technology (Machining),
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, metallurgy science, precision measuring and checking , tool geometry/tool and cutter grinding technology, turning 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 General Machinist but an apprenticeship is recommended. After that, a machinist may:

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

RELATED OCCUPATIONS

- Automotive Machinist,
- Machined Parts Inspector,
- Machine Shop Inspector,
- Maintenance Machinist,
- 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: