



NOC 7265 **WELDERS** and Related Machine Operators

The occupational information provided here is taken from the Job Futures website.

Workers in these occupations operate welding equipment to permanently join metals together. Required skill levels vary widely by the equipment and processes used in performing welding tasks.

Selected Main Duties

Welders perform some or all of the following duties:

- Read and interpret blueprints or welding process specifications;
- Operate manual or semiautomatic welding equipment to fuse metal segments using processes such as gas tungsten arc, gas metal arc, flux cored arc, plasma arc, shielded metal arc (SMAW), resistance welding and submerged arc welding;
- Operate manual or semiautomatic flame cutting equipment;
- Operate brazing and soldering equipment;
- Operate metal shaping machines such as brakes, shears and other metal straightening and bending machines;
- Repair worn parts of metal products by welding an extra layer.

Welding, brazing and soldering machine operators perform some or all of the following duties:

- Operate previously set up welding machines such as spot, butt and seam resistance or gas and arc welding machines to fabricate or repair metal parts;
- Operate previously set up brazing or soldering machines to bond metal parts or to fill holes, indentations and seams of metal articles with solder;
- Start up, shut down, adjust and monitor robotic welding production line;
- Assist with the maintenance and repair of welding, brazing and soldering equipment;
- May adjust welding heads and tooling according to work specifications.

Education/Training

Some secondary school education is usually required with Grade 12 being the norm for hiring skilled welders. Workers and job applicants must have a good knowledge of the basic settings on the welding machines, polarity, blue-print reading, etc. They must also have "hands-on" experience. Some employers, especially machinery manufacturers and pressure vessel manufacturers, require highly skilled welder-fitters for precision and very sophisticated work.

For the more highly skilled welding occupations, completion of an apprenticeship program or a combination of over three years of work experience in the trade and some college or industry courses in welding is usually required to be eligible for trade certification. Trade certification is available, through the Canadian Welding Bureau, for this occupation in Ontario but certification is not a compulsory work requirement for the occupation in the province. Inter-provincial (Red Seal) trade certification, which allows qualified welders to work in other provinces and territories, is available for this trade.

Entry to apprenticeship requires a job and usually the completion of Grade 12. The apprentice applies directly to the employer, union or joint industry committee for an apprenticeship opening. Students who have completed Grade 10 have an opportunity to become registered apprentices while finishing high school under the Ontario Youth Apprenticeship Program. Alternatively, entry into apprenticeship can be pursued through pre-apprenticeship training.

Need more information?

Visit www.workforceplanningboard.org

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Common Job Titles

- AVIATION WELDING TECHNICIAN
- ELECTRIC ARC WELDER
- GAS SHIELDED ARC WELDER
- WELDER
- WELDER APPRENTICE
- PRESSURE VESSEL WELDER
- WELDER FITTER
- BRAZING MACHINE SETTER
- BRAZING MACHINE OPERATOR
- SOLDERING MACHINE OPERATOR
- SPOT WELDER
- PRODUCTION WELDER

Typical Employers

- MOTOR VEHICLE MANUFACTURERS
- MACHINERY & EQUIPMENT MANUFACTURERS
- MOTOR VEHICLE PARTS MANUFACTURERS
- CONSTRUCTION COMPANIES
- STEEL COMPANIES REPAIR SHOPS
- FABRICATED STRUCTURAL METAL PRODUCTS PRODUCERS

Although production welders and flame cutting operators work primarily indoors, many welding positions call for work both indoors and outdoors. In construction, outdoor work is the norm. Lifting and carrying heavy items, prolonged periods of standing and crouching are often required. A welder is exposed to very hot temperatures, noise, fumes and dust. A five-day, 40-hour workweek and shift work are common in this occupation.

Occupational Outlook

Outlook: High

This occupation has high growth prospects over the coming years.

Source: Workforce Planning Board of Grand Erie, Outlook 2021 Project



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