

7265 Welders and Related Machine Operators

Welders operate welding equipment to weld ferrous and non-ferrous metals. This unit group also includes machine operators who operate previously set up production welding, brazing and soldering equipment. They are employed by companies that manufacture structural steel and platework, boilers, heavy machinery, aircraft and ships and other metal products, and by welding contractors and welding shops, or they may be self-employed.

Example Titles

Aviation Welding Technician
Brazing Machine Operator
Brazing Machine Setter
Electric Arc Welder
Journeyman/woman Welder
Laser Welding Operator
Pressure Vessel Welder
Production Welder
Soldering Machine Operator
Spot Welder
Welder
Welder Apprentice
Welder-Fitter

Main duties

Welders perform some or all of the following duties:

Read and interpret blueprints or welding process specifications
Operate manual or semi-automatic welding equipment to fuse metal segments using processes such as gas tungsten arc welding (GTAW), gas metal arc welding (GMAW), flux-cored arc welding (FCAW), plasma arc welding (PAW), shielded metal arc welding (SMAW), oxy-acetylene welding (OAW), resistance welding and submerged arc welding (SAW)
Operate manual or semi-automatic 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 on extra layers.
Welders may specialize in certain types of welding such as custom fabrication, ship building and repair, aerospace precision welding, pressure vessel welding, pipeline construction welding, structural construction welding, or machinery and equipment repair welding.

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

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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.

Employment requirements

Welders

Completion of secondary school is usually required.

Completion of a three-year 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 compulsory in Alberta and available, but voluntary, in Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, British Columbia, the Northwest Territories and the Yukon.

Interprovincial trade certification (Red Seal) is also available to qualified welders.

Welding, brazing and soldering machine operators

Some secondary school education is required.

Several months of on-the-job training are usually provided.

Experience as a machine operator helper may be required.

Experience with robotics may be required.

Additional information

Progression to supervisory positions is possible with experience.

Red Seal trade certification for welders allows for interprovincial mobility.

Classified elsewhere

Supervisors of welders in this unit group (in 7214 Contractors and Supervisors, Metal Forming, Shaping and Erecting Trades)

Underwater welders (in 7382 Commercial Divers)

Wave soldering machine operators (in 9483 Electronics Assemblers, Fabricators, Inspectors and Testers)

Welding inspectors (in 2261 Nondestructive Testers and Inspectors)

Welding technologists (in 2212 Geological and Mineral Technologists and Technicians)

Other Titles

Acetylene Welder
Aircraft Welder
Apprentice Welder
Arc Welder
Arc Welder - Pipeline
Arc Welder, Hand
Assembler Tack Welder
Auto Body Solderer
Automated Welding Machine Operator - Flash
Butt Process
Automatic Welding Machine Operator
Aviation Welding Technician
Battery Lead Burner
Battery Lead-Burner Operator
Blowtorch Operator
Blowtorch Welder
Boiler Welder
Bbrazer
Brazer and Hammerer
Bbrazer, Furnace
Brazer, Gas
Brazer, Resistance
Brazing Machine Operator
Brazing Machine Setter
Cable Welder
Combination Welder
Downhand Welder - Pipeline
Drilling Platform Welder
Drilling Rig Welder
Electric Arc Welder
Electric Arc Welder, Hand
Electric Spot Welder
Electric Spot Welder Operator
Electric Spot-Welding Machine Operator
Fabrication Welder
Fit-Up Welder
Flame-Brazing Machine Operator
Flame-Brazing Machine Setter
Flash Butt Welder
Furnace Brazer
Furnace Solderer
Gas and Arc Welder
Gas Brazer
Gas Welder
Gas-Shielded Arc Welder
Gas-Shielded Arc Welding Machine Operator
General Welder
Hand Arc Welder
Hand Electric Arc Welder
Hand Resistance Welder
Heliarc Welder
Oxyacetylene Welder
Oxyhydrogen Welder
Pipeline Welder
Portable Spot Welder
Precision Welder
Pressure Vessel Welder
Production Induction Brazier
Production Line Solderer
Production Line Spot Welder
Production Line Welder
Production Spot Welder
Production Welder
Resistance Brazer
Resistance Seam Welder
Resistance Welder
Resistance Welder Tender
Resistance Welder, Hand
Resistance Welder-Setter
Resistance Welding Machine Setter
Resistance Welding Set-Up Man/Woman
Rig Welder
Set-Up Man/Woman, Resistance Welding
Shielded-Metal Arc Welder
Side Seaming Tender
Solderer
Solderer, Furnace
Solderer, Induction
Solderer-Dipper
Soldering Machine Operator
Spot Resistance Welder
Spot Welder
Submerged Arc Welder
Submerged Arc Welding Machine Operator
Tack Welder
Thermite Welder
TIG (Tungsten Inert Gas) Welder
Tool and Die Welder
Torch Brazer
Torch Brazing Machine Setter
Torch Welder
Tungsten Inert Gas (TIG) Welder
Type-Soldering Machine Tender
Welder
Welder Apprentice
Welder Operator
Welder, Aircraft
Welder, Arc
Welder, Combination
Welder, Drilling Platform
Welder, Drilling Rig
Welder, Gas

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Hydrogen Braze Furnace Man/Woman
Hydrogen Braze Furnace Operator
Induction Brazer Operator
Induction Brazer, Production
Induction Solderer
Industrial Welder
Iron Brazer
Jig Welder-Fitter
Journeyman/woman Welder
Laser Beam Machine-Welder Operator
Laser Beam Welder
Laser Beam Welding Machine Operator
Laser Welding Operator
Lead Burner
Lead Welder
Machine Operator - Welding, Brazing and Soldering
Machine Type Solderer
Machine Welder
Maintenance Welder
Mesh-Welding Machine Operator
Metal Brazier and Heater
Metal Inert Gas (MIG) Welder
Metal Solderer
Metal Straightener and Heater
Metal Welder
MIG (Metal Inert Gas) Welder
Operator, Laser Beam Machine Welder
Oxyacetylene Torch Welder
Welder, Gas and Arc
Welder, Gas-Shielded Arc
Welder, Heliarc
Welder, Metal Inert Gas (MIG)
Welder, MIG (Metal Inert Gas)
Welder, Oxyacetylene
Welder, Oxyacetylene Torch
Welder, Oxyhydrogen
Welder, Pipeline
Welder, Precision
Welder, Pressure Vessels
Welder, Production Line
Welder, Resistance
Welder, Shielded-Metal Arc
Welder, Spot
Welder, Submerged Arc
Welder, TIG (Tungsten Inert Gas)
Welder, Tool and Die
Welder, Tungsten Inert Gas (TIG)
Welder-Assembler
Welder-Fitter
Welder-Setter, Resistance
Welding Lay-Out Man/Woman
Welding Machine Operator
Welding Machine Operator, Gas-Shielded Arc
Welding Machine Operator, Submerged Arc
Wire Welder

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