Welders

A guide for newcomers to British Columbia
1. Working as a Welder [NOC 7237]

**Job Description**

Working as a welder you 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 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.
- May maintain and repair welding, brazing and soldering equipment
- You may specialize in certain types of welding such as custom fabrication, ship building and repair, aerospace precision welding, pipeline construction welding, or equipment repair welding

Source: National Occupational Classification (NOC)

Industry Overview

Technological improvements such as increased automation are decreasing the number of new jobs for welders. However, highly skilled welding machine setters and operators may see an increase in demand as a result of these new technologies.

The greatest demand for welder jobs will be in construction-related manufacturing, such as architectural and structural metal fabrication. There are limited employment opportunities for welders in the wood product manufacturing sector.


Job Outlook in BC

Welders and related machine operators, NOC 7237

<table>
<thead>
<tr>
<th>Forecasted average employment growth rate</th>
<th>Job openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017 - 2022: +3.8%</td>
<td>2017: +540</td>
</tr>
<tr>
<td>2022 - 2027: +2.0%</td>
<td>2022: +270</td>
</tr>
<tr>
<td></td>
<td>2027: +250</td>
</tr>
</tbody>
</table>

Source: B.C. Labour Market Outlook

10 year expected job openings: 2,800
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WorkBC provides job openings in BC regions from 2017-2027:

<table>
<thead>
<tr>
<th>Region</th>
<th>Employment in 2017</th>
<th>Average Annual Employment Growth</th>
<th>Expected Number of Job Openings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Island</td>
<td>1,190</td>
<td>1.0%</td>
<td>400</td>
</tr>
<tr>
<td>Lower Mainland/Southwest</td>
<td>4,670</td>
<td>0.6%</td>
<td>1,430</td>
</tr>
<tr>
<td>Thompson-Okanagan</td>
<td>1,600</td>
<td>0.4%</td>
<td>460</td>
</tr>
<tr>
<td>Kootenay</td>
<td>540</td>
<td>0.9%</td>
<td>190</td>
</tr>
<tr>
<td>Cariboo</td>
<td>570</td>
<td>-0.1%</td>
<td>100</td>
</tr>
<tr>
<td>North Coast &amp; Nechako</td>
<td>480</td>
<td>0.2%</td>
<td>100</td>
</tr>
<tr>
<td>Northeast</td>
<td>48</td>
<td>0.5%</td>
<td>120</td>
</tr>
</tbody>
</table>

You can learn more about working as a welder in BC from:

- **WorkBC Career Profiles**
  
  [https://www.workbc.ca/Job-Seekers/Career-Profiles/7237](https://www.workbc.ca/Job-Seekers/Career-Profiles/7237)

- **Career Cruising**
  

Available from the VPL Digital Library | Explore our Digital Library page
Types of Employers

As a welder you may work for:

- manufacturing / factories
- machine shops
- construction sites
- oil and gas rigs and pipelines
- welding contractors and welding shops
- self employed

Those working in manufacturing may work at: sawmills; pulp and paper mills; mines; shipbuilding or aircraft manufacturing facilities; other metal products.

Salary

In BC, the median annual salary for welders and related machine operators is $60,482. Your salary depends on job requirements, work conditions and location.

Journey-level welders often earn around $19 to $32 an hour. Highly experienced welders can earn $50 an hour, depending on what type of welding is required. Those working on pipelines in remote locations may make up to $100,000 a year.

Sources: WorkBC and Career Cruising
In BC regions you can expect to make:

<table>
<thead>
<tr>
<th>Community/Area</th>
<th>Low</th>
<th>Median</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>British Columbia</strong></td>
<td>16.00</td>
<td>28.50</td>
<td>40.76</td>
</tr>
<tr>
<td>Cariboo Region</td>
<td>21.00</td>
<td>33.66</td>
<td>40.43</td>
</tr>
<tr>
<td>Kootenay Region</td>
<td>19.50</td>
<td>34.00</td>
<td>44.59</td>
</tr>
<tr>
<td>Lower Mainland - Southwest Region</td>
<td>16.00</td>
<td>28.00</td>
<td>37.00</td>
</tr>
<tr>
<td>Nechako Region</td>
<td>17.53</td>
<td>34.91</td>
<td>45.03</td>
</tr>
<tr>
<td>North Coast Region</td>
<td>26.31</td>
<td>34.00</td>
<td>41.85</td>
</tr>
<tr>
<td>Northeast Region</td>
<td>23.00</td>
<td>30.00</td>
<td>42.65</td>
</tr>
<tr>
<td>Thompson–Okanagan Region</td>
<td>18.00</td>
<td>29.90</td>
<td>45.00</td>
</tr>
<tr>
<td>Vancouver Island and Coast Region</td>
<td>16.00</td>
<td>28.50</td>
<td>40.76</td>
</tr>
</tbody>
</table>


**Working Hours**

Most welders work 40 hours per week. If you are working in mills, factories and processing plants you may be required to work nights / weekends, or do shift work.

Welders in the construction industry often relocate to different job sites, sometimes in remote regions. Short periods of unemployment between projects are common for these workers.
2. Skills, Education and Experience

Skills

- good manual dexterity and hand-eye coordination
- good analytical ability
- high level of design sense
- solid understanding of computerized machinery
- ability to follow instructions precisely
- strong technical and artistic interests
- comfortable with heights

Education and Experience

- Completion of secondary school is usually required.
- Certification is available in BC but not required

Qualifications

This is not a regulated profession in BC

Trade certification is not mandatory in B.C., but it will likely increase your job opportunities. Two separate Welder programs are available: an Apprenticeship model comprising Levels 1-to-3, and the non-apprentice programs of "Welder B and A". For apprenticeships, you must find an employer who is willing to sponsor you in the program.

Individuals completing the apprenticeship program are qualified to take the Interprovincial Red Seal exam (the final exam for this trade). If successfully passed, you receive the Red Seal endorsement, which allows you to work as a welder anywhere in Canada. An optional Multi-Process Alloy Welding (MPAW) endorsement is also available.
More information:

- **ITA BC – Welder Program**  
  [http://www.itabc.ca/program/welder](http://www.itabc.ca/program/welder)

- **Trades Training BC**  
  [https://www.tradestrainingbc.ca/Trades/Metal-Forming-Shaping-Welding](https://www.tradestrainingbc.ca/Trades/Metal-Forming-Shaping-Welding)

- **Red Seal Program**  
  [http://www.red-seal.ca/w.2lc.4m.2@-eng.jsp](http://www.red-seal.ca/w.2lc.4m.2@-eng.jsp)

- **Workforce Development Agreement**  
  [http://www.itabc.ca/apprentice-service/workforce-development-agreement](http://www.itabc.ca/apprentice-service/workforce-development-agreement)

This project, which is funded by the Industry Training Authority, provides financial and other support to help you gain your certification.
3. Finding Jobs

You’ll find job advertisements in local newspapers, electronic sources, as well as through professional associations’ publications.

Local Newspapers

You can look at the *Vancouver Sun* & *The Province* at Vancouver Public Library for free. Check the job postings daily, the careers section in the *Vancouver Sun* on Wednesdays and Saturdays and, in *The Province* on Sundays.

Job White Pages

- Available in print at the Central Library or online at [http://www.vpl.ca/digital-library/jobfreewaycom](http://www.vpl.ca/digital-library/jobfreewaycom)
  
  Available from the VPL Digital Library | Explore our Digital Library page
  
  Access at VPL locations only

Online Job Postings

- Indeed.com
  
  [http://ca.indeed.com/advanced_search](http://ca.indeed.com/advanced_search)

- Steel Toe Jobs
  
  [https://steeltoejobs.com/](https://steeltoejobs.com/)

- Skilled Workers.com
  
  [https://skilledworkers.com/](https://skilledworkers.com/)

Professional Associations’ Career Resources

- Canadian Welding Bureau
  
  [https://www.cwbgroup.org/about/careers](https://www.cwbgroup.org/about/careers)
Identifying the Right Position

When you browse job advertisements, you’ll find a range of different job titles that are relevant.

For welders, look for these related job titles:

- welding technician
- brazing machine operator
- arc welder
- journeyman/woman welder
- laser welding operator
- pressure vessel welder
- soldering machine operator
- spot welder
- welder apprentice
- welder-fitter

Source: NOC
Creating a List of Potential Employers

You can use directories to produce lists of employers who employ welders in Vancouver or the Lower Mainland. Contact them directly to find out if they’re hiring.

- **British Columbia Business to Business directory**
  Browse through companies listed under Section 2 - Industry (welding)
  Available at the Central Library, CB380 B8622

- **Business In Vancouver Book of Lists**
  Biggest Construction Companies in BC
  Available at the Central Library, 338.9711 B97B or online
  [https://biv.com/lists](https://biv.com/lists)

- **Canadian Welding Bureau (CWB)**

- **Reference Canada**

Click on “Start Search” beside Canadian Businesses, then select the "Advanced Search" button. Select both "Keyword/SIC/NAICS" under Business Type and "City" under Geography. In the top search box enter “welding” and click SEARCH. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.

Available from the VPL Digital Library | Explore our Digital Library page

**NOTE:** You can access this database from a Library computer. If you are using a computer from outside the Library, you will need a Vancouver Public Library card to login to this database. After clicking on the database name, you will be asked to enter your library card number and PIN (usually last four digits of your telephone number)
4. Applying for a Job

In Canada, employers usually expect to receive a resume (curriculum vitae) and a cover letter that identifies the position you are applying for and summarizes your relevant experience.

Use the library catalogue, http://vpl.bibliocommons.com/ to find books on writing resumes and cover letters specific to your industry.

To learn about applying for jobs in Canada, use the following pathfinders which are available in print at the Central Library or online at http://skilledimmigrants.vpl.ca/.

- **Writing Resumes and Cover Letters**
  Go to http://skilledimmigrants.vpl.ca
  [Search Writing Resumes and Cover Letters]

- **Getting Canadian Work Experience**
  Go to http://skilledimmigrants.vpl.ca
  [Search Getting Canadian Work Experience]

- **Networking for Employment**
  Go to http://skilledimmigrants.vpl.ca
  [Search Networking for Employment]

- **Learn More About Working in BC and Canada**
  Go to http://skilledimmigrants.vpl.ca
  [Search Learn More About Working in BC and Canada]
5. Getting Help from Industry Sources

**Industry Associations**

Welding and construction associations in BC and Canada provide assistance and information on training and certification. Registration and fees are required for membership.

- **Canadian Welding Bureau (CWB)**
  [https://www.cwbgroup.org/](https://www.cwbgroup.org/)

- **Industry Training Authority - ITA BC**
  [http://www.itabc.ca/](http://www.itabc.ca/)

- **BuildForce Canada**

- **BC Construction Association**
  [https://www.bccassn.com/jobs-&-careers/](https://www.bccassn.com/jobs-&-careers/)

**Industry Journals**

Industry journals provide information about trends in the industry. Search the Vancouver Public Library catalogue for journals related to your profession.

Examples at the Central Library and online:

- **Canadian Metalworking**
  Available at Central Library 621.05 C21 and online at

- **Canadian Welding Bureau publications**
  [https://www.cwbgroup.org/association/publications](https://www.cwbgroup.org/association/publications)
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- Construction Canada
  Available at the Central Library, 692.05 S74 and online at
  http://www.constructioncanada.net/

Questions? Please ask the Information Staff in the Central Branch, Vancouver Public Library, or telephone 604-331-3603.

Please note that the information in this guide is also available online through the Skilled Immigrant InfoCentre website at http://skilledimmigrants.vpl.ca