Heavy Equipment Operators and Heavy Duty Equipment Mechanics
An employment guide for newcomers to British Columbia

skilled immigrant

infocentre
Heavy Equipment Operators (NOC 7521) and Heavy Duty Equipment Mechanics (NOC 7312)

**Heavy Equipment Operators may also be called:**
- backhoe operator
- bulldozer operator
- excavator operator
- grader operator
- side boom tractor operator

**Heavy Duty Equipment Mechanics may also be called:**
- construction equipment mechanic
- diesel mechanic
- farm equipment mechanic
- heavy mobile logging equipment mechanic
- heavy mobile mining equipment mechanic
- heavy-duty equipment technician
- tractor mechanic
1. What Would I Do?

Heavy Equipment Operators
You operate heavy equipment used in the construction and maintenance of roads, bridges, oil and gas pipelines, buildings and other structures. You may also work in mining or forestry.

Your duties can include:
- operate heavy equipment such as backhoes, bulldozers and grazers to lift, move or place equipment or materials
- run bulldozers or other heavy equipment to clear brush and stumps prior to logging activities
- operate heavy paving and surfacing equipment during highway and road construction
- run power shovels to excavate rock or other materials from mines, quarries or construction pits

Heavy Duty Equipment Mechanics
You repair and maintain heavy-duty equipment used in transportation, construction, forestry, manufacturing, farming, mining and similar activities. This includes bulldozers, graders, tractors, forklifts and wheeled and tracked vehicles of all types.

Your duties can include:
- check heavy equipment for proper performance
- diagnose faults or malfunctions using computerized testing equipment
- adjust equipment and repair or replace defective parts using hand and power tools
- test repaired equipment for proper performance and make sure that work meets manufacturer specifications
- clean, lubricate and perform other routine maintenance work on equipment
More information:

- WorkBC Career Profile for Heavy Equipment Operators
  http://www.workbc.ca/Job-Seekers/Career-Profiles/7521
- WorkBC Career Profile for Heavy Duty Equipment Mechanics
  http://www.workbc.ca/Job-Seekers/Career-Profiles/7312

2. Am I Suited For This Job?

<table>
<thead>
<tr>
<th>Heavy Equipment Operators</th>
<th>must have mechanical ability, work well under pressure, excellent reflexes, good vision and depth perception.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Duty Equipment Mechanics</td>
<td>must have mechanical ability, work well with your hands, good problem-solving skills, eye coordination, physical strength and stamina.</td>
</tr>
</tbody>
</table>

**Heavy equipment operators** - you often work in hazardous locations such as construction sites and underground sites where you may be exposed to dust, noise and vibration.

**Heavy duty mechanics** – you may work outdoors at construction, mining and logging sites, where you are exposed to weather of all kinds. You may work indoors in workshops and production plants. Work sites can be dirty, dusty and noisy. You are required to lift heavy parts and tools, and stand or lie in awkward positions

Sources:

- WorkBC Career Profiles
3. What Are The Wages And Benefits?

**Heavy duty equipment operators:**
In British Columbia, the average median salary is $60,149.

In BC’s regions, you can expect to make:

<table>
<thead>
<tr>
<th>Location</th>
<th>Low</th>
<th>Median</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>18.00</td>
<td>27.88</td>
<td>35.00</td>
</tr>
<tr>
<td>Cariboo Region</td>
<td>18.00</td>
<td>27.88</td>
<td>35.00</td>
</tr>
<tr>
<td>Kootenay Region</td>
<td>22.00</td>
<td>30.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Lower Mainland - Southwest</td>
<td>16.00</td>
<td>26.00</td>
<td>34.00</td>
</tr>
<tr>
<td>Nechako Region</td>
<td>18.00</td>
<td>27.86</td>
<td>35.00</td>
</tr>
<tr>
<td>North Coast Region</td>
<td>18.00</td>
<td>27.86</td>
<td>35.00</td>
</tr>
<tr>
<td>Northeast Region</td>
<td>25.00</td>
<td>32.00</td>
<td>39.00</td>
</tr>
<tr>
<td>Thompson–Okanagan Region</td>
<td>22.70</td>
<td>28.00</td>
<td>37.65</td>
</tr>
</tbody>
</table>


The construction industry slows down during the winter in colder climates which can affect your annual earnings. You may only find full-time construction work for part of the year.

If you work for government agencies or large companies you may also receive benefits such as dental coverage, paid vacation and sick days. If you belong to a union your wages and benefits are negotiated on your behalf by union representatives.
Heavy duty equipment mechanics:

In British Columbia, the median annual salary is $62,568.

In BC’s regions you can expect to make:

<table>
<thead>
<tr>
<th>Location</th>
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<th>Median</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>18.00</td>
<td>31.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Cariboo Region</td>
<td>18.00</td>
<td>31.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Kootenay Region</td>
<td>18.00</td>
<td>31.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Lower Mainland - Southwest Region</td>
<td>16.00</td>
<td>26.44</td>
<td>39.01</td>
</tr>
<tr>
<td>Nechako Region</td>
<td>18.00</td>
<td>31.00</td>
<td>43.00</td>
</tr>
<tr>
<td>North Coast Region</td>
<td>18.00</td>
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<td>18.00</td>
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<td>43.00</td>
</tr>
<tr>
<td>Thompson–Okanagan Region</td>
<td>18.00</td>
<td>31.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Vancouver Island and Coast Region</td>
<td>18.00</td>
<td>30.45</td>
<td>43.00</td>
</tr>
</tbody>
</table>


Your salary varies depending on the size of shop you work in, and whether you are located in a rural or urban area. In any shop, you are typically expected to provide your own hand tools, and many mechanics have invested thousands of dollars them.

Sources:

- WorkBC Career Profiles & *Career Cruising* database (Profiles for Heavy Equipment Operator & Heavy Equipment Technician)
4. What Is The Job Outlook In BC?

Employment opportunities are expected to be good for **Heavy Equipment Operators**, particularly in the non-residential sector.

Due to the seasonal nature of this occupation, your employment opportunities may vary depending on the time of the year.

**Heavy Equipment Operators**

![Chart from WorkBC, 7521](image)

Employment opportunities will be good for **Heavy-Duty Equipment Mechanics**. Demand is driven by activity in a wide variety of industries, such as transportation, mining, oil and gas, and construction. This broad employment base helps to vary your work opportunities.

Heavy-duty equipment mechanics with up-to-date electronics training are expected to be in greatest demand.

You will also have an advantage finding work in the trucking industry if you have skills using new technologies to reduce the greenhouse gas emissions of diesel engines.
Heavy Duty Equipment Mechanics

<table>
<thead>
<tr>
<th>Expected annual demand growth</th>
<th>Job openings (2015-2025)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4%</td>
<td>2,750</td>
</tr>
</tbody>
</table>

Rate (2015-2025)

**Occupation Outlook for B.C.:**

- % of job openings from replacement: 89%
- % of job openings from expansion: 11%

Chart from WorkBC, NOC 7312

Sources:

- WorkBC Career Profiles
5. How Do I Become a Heavy Equipment Operator or Heavy Duty Equipment Mechanic?

Although there are no formal requirements to work as a **Heavy Equipment Operator**, employers prefer:

- a high school diploma or its equivalent
- completion of a one to two year apprenticeship program **OR** some high school, college or industry courses in heavy equipment operating **combined** with on-the-job training

You may also start out as a labourer or truck driver, and learn on the job from experienced heavy equipment operators.

More information:

- **BC Industry Training Authority**
  
  http://www.itabc.ca/program/heavy-equipment-operator

**Heavy duty equipment mechanic**

*Heavy duty equipment technician/mechanic is an Inter-provincially recognized Red Seal trade. With a Red Seal, you can work in this trade anywhere in Canada.*

Completion of secondary school is generally required to work as a heavy-duty equipment mechanic.

Although trade certification is not mandatory, it will likely increase your job opportunities. You become certified by completing an apprenticeship program through the Industry Training Authority of BC (ITA).
Upon completion of the apprenticeship program, as well as successfully passing the Interprovincial Red Seal exam, you become certified as journeyperson. Once you pass the Interprovincial exam (the final exam for this trade), you automatically have a Red Seal endorsement.

If you have extensive experience working as a heavy duty equipment mechanic you may also be certified through the challenge process. This includes completing 9,570 hours of work in the trade and successfully writing the Interprovincial Red Seal exam.

More information:

- **BC Industry Training Authority**
  [http://www.itabc.ca/program/heavy-duty-equipment-technician](http://www.itabc.ca/program/heavy-duty-equipment-technician)

- **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)

- **Immigrants in Trades Training Initiative (ITTI)**
  [http://www.itabc.ca/immigrants-trades/overview](http://www.itabc.ca/immigrants-trades/overview)

  This project, which is funded by the Industry Training Authority, provides financial and other support to help you gain your certification.
6. How Do I Find A Job?

**Where would I work?**

**Heavy equipment operators** work in a variety of settings including:
- construction and logging companies
- heavy equipment contractors
- government agencies
- oil & gas pipelines
- cargo-handling

**Heavy duty equipment mechanics** may work in:
- mining companies
- construction companies
- farm equipment manufacturers
- heavy equipment dealers
- rental and service companies
- railway companies

**Finding Advertised Jobs**

Jobs are advertised in a variety of sources including newspapers, magazines and online job sites.

**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.

**Online Job Postings**

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

- WorkBC Job Postings
  [https://www.workbc.ca/](https://www.workbc.ca/)
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An employment guide for newcomers to British Columbia

- **Job Bank**
  
  http://www.jobbank.gc.ca/job_search.do

- **MyJobSite: Careers in construction and design**
  
  http://www.myjobsite.ca/

**Finding "Hidden Jobs"**

Many job vacancies are not advertised. The resources below help you with finding jobs in this “hidden” job market.

**Using Directories to Create a List of Potential Employers**

You can use company directories to produce lists of employers who employ heavy equipment operators and heavy duty equipment mechanics in Vancouver or the Lower Mainland. Contact them directly to find out if they’re hiring.

- **British Columbia Construction Association Membership Directories**
  

- **BC Road Builders and Heavy Construction Association Members List**
  
  http://www.roadbuilders.bc.ca/members.php

- **Reference Canada**
  
  http://www.vpl.ca/digital-library/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 "construction"** and click SEARCH. Select the appropriate headings. Lower down, select the Province, choose the cities, and click the "View Results" button.

**You can also try entering “heavy equipment” or “paving” to locate more companies.**

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.

Last updated: November 24, 2016
Networking, Volunteering and Temporary Agencies

Many positions are filled by people who have been recommended by someone they know. Networking, working as a volunteer or registering with a temporary employment agency are good ways of helping you find jobs and meet people in your industry.

**Networking and the Hidden Job Market:**

*When looking for work, be sure to talk to friends, relatives and neighbours. They may know someone who is hiring! Working as a volunteer, attending events, and joining clubs and associations are good ways to gain “Canadian experience.” They are also good ways to meet people to learn about the local job market.*

**Volunteer opportunities**

- **Volunteer BC**
  
  [http://www.volunteerbc.bc.ca/](http://www.volunteerbc.bc.ca/)

- **Habitat for Humanity**

  [http://www.habitatgv.ca/](http://www.habitatgv.ca/) (can volunteer at construction sites or at ReStores)

For additional tips see the guides published on the Skilled Immigrant InfoCentre Website:  [http://skilledimmigrants.vpl.ca](http://skilledimmigrants.vpl.ca)

- **Networking for Employment**
- **Getting Canadian Work Experience**
7. Applying for a Job

In Canada, employers usually expect to receive a resume and a cover letter that identifies the position you are applying for and summarizes your experience. Use the library catalogue, http://vpl.bibliocommons.com/ to find books on writing resumes and cover letters specific to your industry.

For more information see:

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

8. Where Can This Job Lead?

Heavy equipment operators: you may progress to supervisory positions with experience (for example, foreperson).

Heavy-duty equipment mechanics: you may specialize in specific types of machinery such as combines or tracked vehicles, or in diesel engines, fuel injection, hydraulics or electronics.

With experience, you may advance to senior positions, such as supervisor or service manager, or you may open your own businesses.

- **STEP**
  
  http://www.stepbc.ca/
  
  STEP is a no-fee employment program can help you get jobs in the construction industry

- **Careers in Construction**
  
  http://www.careersinconstruction.ca/en/careers/career-finder

- **BC Construction Association**
  
  http://www.bccassn.com/

- **Careers in Oil & Gas**
  
  http://www.careersinoilandgas.com/

- **Learn More About Working in BC and Canada**
  
  Go to http://skilledimmigrants.vpl.ca
  
  [Search Learn More About Working in BC and Canada]

- **Industry Profiles:**
  
  Construction, Oil & Gas, and Transportation
  
  Go to http://skilledimmigrants.vpl.ca

**Questions? Please ask the Information Staff at the Central 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/*.