



# CNC Machine Operator [HV] Job Description

## Prime Responsibilities

You will be responsible for operating a computer numerically controlled (CNC) machine. These machines perform manufacturing functions such as precise drilling and shaping of parts.

The machines can produce one part in high volume or a unique, one-at-a time, part. Job duties vary to some degree by the type of operation.

As a CNC Operator in a **high-volume production** plant you would perform the following duties:

- At the beginning of your shift, you would attend a brief meeting with production supervision to be informed about what machines and production you will be running that day.
- You would examine your machine to ensure it meets required safety and operations practices [tooling is correct etc.].
- You would then position the material to be machined on the machine. This activity must be performed accurately. In high volume plants, it is performed on a repetitive basis throughout your shift.
- After starting production, you monitor the operation of the machine to ensure there are no problems during the operation.
- If an issue develops, you are accountable to inform your supervisor immediately. With experience, you should be able to inform the supervisor with additional facts and in-sights into the situation.
- When the item has been produced, you will be responsible for ensuring the item was produced to the customer's requirements. This activity is called quality inspection.
- It is important to maintain a focus on safety at all times.



## Working Conditions

Firms may be medium-sized and very specialized or much larger and produce a wide variety of items in long production runs. Trainees need to appreciate that successful job performance involves performing the job tasks repeatedly in a reliable and accurate manner.

No matter which type of shop employs you, safety is an important value you must have. You will be required to wear safety protective gear such as earplugs, boots and goggles.

It is a physical job; you will be on your feet all day. You may have to lift heavy materials during the day. Often manufacturing environments are noisy and during the summer they may be hot if the facility is not air conditioned.

You will be busy all the time. The equipment you will be using is very expensive. Firms attempt to schedule work to keep this equipment producing items as much as they can. This allows the firm to satisfy customer requirements and make a profit, thereby paying you and other employees.

## Will I Like this Job and be Good at it?

If you can answer 'yes' to most of the following statements, then this job might be an excellent choice for you.

- I like making things.
- I am curious about how things are made.
- I am good with details.
- I like getting my hands dirty.
- I like using my brain and thinking.
- I am good with math – addition, subtraction, etc.
- I enjoy working relatively independently.
- I want to have responsibility and be accountable for things I do.
- I don't shy away from physical activity.
- I would rather be busy all the time than having periods of inactivity.
- I like being on my feet, doing stuff, rather than sitting at a desk.

## Videos of CNC Machines

Below are three short YouTube videos of CNC machines and their facilities that demonstrate most of points described above and provide a job preview for you:

- Millturn CNC Machine <https://youtu.be/kfsNz-vUoqA> duration 5:43
- Mazak Integrex 200-IV ST <https://www.youtube.com/watch?v=a5StZYExpq0> duration 3:33
- [www.cyclestartshow.com](http://www.cyclestartshow.com)



## Technical Learning Outcomes

At the end of your training program, you will be able to do the following:

- Capable of operating the machine and producing finished product for high volume/repetitive work jobs.
- Can explain the operation of a CNC machine and tool offsets on the outcome of the part being machined.
- Able to read and interpret Operator Data sheets, identify the feature number and then know the area to measure and which tools will be used, without supervision.
- Able to operate more than one machine of the same type at the same time, in appropriate circumstances.
- Able to place and secure work on the machine correctly, efficiently without supervision.
- Reviews cutting inserts/ tools prior to their use, and if in the judgment of the Operator the condition is not appropriate, brings this issue to the attention of the shop foreman.
- Able to demonstrate proficient use of measuring tools – choosing the correct one and its application.
- Able to use hand tools as required.
- Able to demonstrate the correct use and handling of measurement instruments.

The specific machines on which the employee has demonstrated capability will be noted on the certificate.

## What do I get out of this job?

The job pays reasonably well. Your starting wage will be between \$13.00 and \$14.50 per hour. In Ontario, after two years of experience, CNC Operators are paid from \$15 to \$17.00 per hour and, depending on the firm they are working for, may be eligible to receive bonuses.

## What else do I get?

This can be a life-altering opportunity. Becoming a CNC Operator can be an excellent decision for you. The job is interesting and as stated previously, pays reasonably well. It is in demand and is unlikely to be eliminated as manufacturing processes change and evolve. Long term employment and the stability it brings is a good thing to have in a job

Even better – it can provide a career for you in advanced manufacturing. By applying yourself, learning more about machining, asking to learn about more difficult machining assignments, you could become a candidate for a CNC Machinist job or other more technical jobs. CNC Machinists make more money than CNC Operators. If you demonstrate other non-technical skills, you could become a quality specialist or a supervisor.