



# OVERVIEW OF THE JOB

## CNC MACHINIST [Level 1]

### Prime Responsibilities

In this job, you would be responsible for setting up and operating a computer numerically controlled (CNC) machine. These machines perform manufacturing functions such as precise drilling and shaping of parts by removing metal.

The machines can produce one part in high volume or a unique, one-at-a time part. There are a variety of CNC machines – mills, lathes, drills, grinders and others.

As a CNC Machinist (Level 1), you would perform the following duties or tasks:

- At the beginning of the production run, you would review the instructions for the product or part to be produced. Your supervisor will give you these written work orders at the beginning of each work day.
- You would ensure the right computer program is in place – this program controls the machine’s functions and instructs the machine to complete the correct operations.
- You would obtain the correct tools that need to be inserted into your machine to produce the items described in your work orders.
- You would then position the material to be machined on the machine.
- After turning the machine on, you monitor the operation of the machine to ensure there are no problems during the operation
- If there is an issue, you have to respond – once you have sufficient experience, you will know whether the program needs to be modified. Another option might be to change the tooling. Of course, you can consult with your supervisor. The point is you are responsible for correcting the issue.
- When the item or part has been produced, you will be responsible for ensuring that it was produced to the customer’s requirements. This activity is called quality inspection.

## **Working**

A variety of manufacturing firms use CNC machines. Firms may be small and very specialized or much larger and produce a wide variety of items in long production runs.

No matter which type of shop you are employed in, safety is an important value you must practice at all times. You will be required to wear safety protective gear such as earplugs, boots and safety glasses.

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 in operation producing items as much as they can. This allows the firm to satisfy customer requirements and make a profit, thereby paying you and your fellow employees. It is therefore important to protect it from malfunction and undue wear at all times.

## **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 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 Machining**

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 by Emco Group](#), duration 5:43
- [Mazak Integrex 200-IV ST](#), duration 3:33
- [www.cyclestartshow.com](http://www.cyclestartshow.com) multiple videos, various times

## **What do I get out of this job?**

The job pays reasonably well. Your starting wage will likely be between \$ 13.50 and \$ 15.00 per hour. At the end of the training program, you can expect a wage increase, assuming you meet the certification standards. After one year, you could be earning between \$ 17 and \$ 19 per hour. You would also be receiving incentive or bonus income in addition to your wages, if the company has an incentive system in place. Incentive systems, in general, pay out to employees if the company is having a good year financially.

You can support a family at this level of income.

## **What else do I get?**

This can be a positive, life altering opportunity. Becoming a CNC machinist can be an excellent decision for you. The job is interesting and pays reasonably well. Once you are fully qualified, you could be making between \$25 and \$35 per hour. This job is in demand and is unlikely to be eliminated as manufacturing processes change and evolve. The long-term employment and stability it brings is a very good thing to have in a job.

Even better – it can provide a career for you in manufacturing. By learning more about computer programming, you could become a CNC programmer. Having multiple skills will provide you with additional job options. If you demonstrate other skills and knowledge, you could become a quality specialist or a supervisor. It is interesting to note that most owners of shops and factories in the tooling and machining sector started on the shop floor. Can you visualize your name on the company?