



#### Page Contents

- [What is CNC Woodworking?](#)
  - [Explaining CNC Technology](#)
  - [How CNC Machines Work](#)
  - [CNC Router Advantages in Woodworking](#)

## What is CNC Woodworking?

Since CNC (Computer Numerical Control) technology came into being in the 1970s, it has been able to transform manufacturing production lines into a more speedy and efficient process. However, it's not only metal and other big industries that are using this technology; woodworkers have also taken to using this automation process for their CNC [woodworking projects](#).

[Make Your Own CNC Woodworking Router!](#)

[Click here](#)

## Explaining CNC Technology

In simple language, CNC machines automate the processes that would otherwise have been done manually. They also work in conjunction with other manufacturing processes. For example, it would take a while to drill a hole. Imagine how long it would take to drill large numbers of them! Such a tiring process could increase the likelihood of human error in the manufacturing line.

A CNC machine could lower the incidence of human-related errors while retaining precision and consistency in the workpieces. Time spent on production would also be greatly reduced, thus improving productivity.

With such important benefits, businessmen from large-scale woodworking enterprises, down to suburban home woodworkers, would all be very likely to include a CNC machine or two amongst their [woodworking tools and equipment](#).

## How CNC Machines Work

A CNC machine is programmed and controlled by computer software. The computer uses a computer-aided design (CAD) module to follow the design to be machined. Thus, it controls the movement of the machine.

The different types of CNC machine share some common characteristics. They have axes which are programmed to run in specific directions. The more axes a CNC machine has, the more complex designs it can produce. Some models include a cooling feature and an automatic tool changer, which replaces the spindle automatically when required.

This video explains 5 different axes of movement:

The CNC woodworking machine has a controller which interprets the commands sent to it by the CNC program. The program delivers step-by-step “instructions” to the machine to perform the manufacturing process. In woodworking, the operation generally used is routing, which is a type of drilling. There are CNC machines that have a variety of tools to perform several tasks but use one interface.

## CNC Router Advantages in Woodworking

The CNC wood carving machine makes it possible to improve production methods and finish off more wood pieces in less time, without sacrificing quality. Since CNC woodworking

machines are accurate and precise, they could replicate thousands of quality pieces.



A finished CNC wood router project