

# Beginner's Wood CNC Machine Checklist

If you're just starting out with CNC woodworking, it's easy to feel overwhelmed. This guide provides a focused checklist with the exact tools, free software, project ideas, wood types, and safety tips you need.

## Starter Tool List

Before starting your first cut, make sure you have these essentials:

- **CNC Router Machine** – Trusted beginner-friendly machines include [Dremel 4300-5/40 High Performance Rotary Tool Kit](#), [Dremel Lite 7760-N/10 Cordless Rotary Tool Kit](#), [Amana Tool Spektra Coated CNC Bit Pack \(AMS-177-K or AMS-188-K\)](#) These are reliable, well-supported, and ideal for learning.
- **Computer or Laptop** – You'll need this to run design software and communicate with the CNC machine.
- **Collets and Bits** – Start with basic 1/8" and 1/4" bits, including flat end mills, ball nose, and V-bits for a variety of carving styles.
- **Clamps & Hold-downs** – These keep your wood securely in place during carving, which is essential for accuracy and safety.
- **Shop Vacuum or Dust Collector** – Dust builds up quickly; keeping your area clean is both safer and more efficient.
- **Calipers & Rulers** – Measure materials and tool depth accurately to avoid mistakes.
- **Safety Gear** – Use safety glasses, ear protection, and a dust mask to protect yourself every time you run your CNC.

## Free Software Links

You don't need to pay for great software to get started. These free options are perfect for beginners:

**Design (CAD):**

- **Inkscape** – Excellent for creating 2D vector graphics.
- **Fusion 360 (Hobby License)** – Offers advanced 3D CAD/CAM functionality.

**CAM (Toolpath Generation):**

- **Carbide Create** – Simple and beginner-friendly.

**Control Software:**

- **Universal Gcode Sender** – Connects your computer to the CNC machine and runs your projects.

## First 5 Simple Project Ideas

**Build confidence with small, useful projects like:**

1. **Name Sign** – Personalize names or words in bold fonts.
2. **Coasters** – Great way to practice repetitive carving and sealing.
3. **Key Holder Rack** – Make a wall-mounted rack with hooks and simple cutouts.
4. **Phone Stand** – Functional, easy, and popular among beginners.
5. **Cutting Board with Engraving** – Add initials, designs, or even recipes.

## ✔ **Wood Types for Carving**

**Choose beginner-friendly woods that carve cleanly:**

- **Basswood** – Very soft and easy to shape.
- **Pine** – Readily available, affordable, and ideal for test runs.
- **Birch Plywood** – Stable and widely used for flat designs.
- **Maple** – A bit harder, but excellent for sharp engravings.
- **Cherry** – Medium-hard wood with beautiful grain and great finishing results.

## ✔ **Safety & Setup Tips**

**Follow these tips to stay safe and avoid errors:**

- **Read the manual** – Learn your machine's specific setup and limits.
- **Secure your material** – Always use clamps or hold-downs.
- **Ventilation** – Especially important when cutting plywood or MDF.
- **Check bit tightness** – Make sure the collet and bit are secure.
- **Don't leave it unattended** – Stay nearby while it's running.
- **Do a dry run** – Test your file and toolpaths before cutting real material.