

Course 1: Legacy CNC 101
Module 1: Preparing Your Shop For CNC
1.1: Receiving Your CNC

Lesson 8 - Essential Supply List Before Your CNC Arrives

Essential Supplies Checklist (Details & Links below)

- Dedicated Computer for CAD/CAM Software
- Dust Boot (for Manual Tool Change Spindles Only)
- Leveling Pads
- Cutters
- Collets
- Double-Stick Tape
- Grease Gun
- Grease
- Dry Grease

Dedicated Computer for CAD/CAM Software:

You will need a dedicated PC computer to design & program parts for the CNC machine. Here are the minimum requirements for the PC computer to run our suggested CAD/CAM software.

- Processor: 2 Ghz Multi-Core X86 or x64 CPU
- Ram: 4 GB
- Disk Space: Minimum of 500GB
- Display: 1024 x 768 graphics display
- Operating System: 10 or 11
- Graphics Card: Minimum of 2 GBs of dedicated RAM and OpenGL 3.3 or later
- Ports: USB

Dust Boot:

If you have a manual tool change spindle, you will need to order a dust boot to add dust collection to the machine. Here are links to the dust boots we recommend from “OneGuyInAShop”.

- [3HP Spindle Dust Boot](#)
- [6 HP Spindle Dust Boot](#)

Leveling Pads:

The leveling pad will be used to help level your machine and dampen any vibrations. We recommend the leveling pads from mcmaster.com. You will need ½" bolts to fit the foot pad hole pattern. Also, make sure the leveling pads are rated for the machine's weight.

- Maverick 3x5: Weight - 850 lbs., Hole Size - 1/2"
- Maverick 4x4: Weight - 1900 lbs., Hole Size - 1/2"
- Maverick 4x8: Weight - 2700 lbs., Hole Size - 1/2"

Cutters:

This cutter list will include all the tools that are used during training course 1&2 to produce the fast-start samples, table fixtures and onboarding projects. Listed will be the order number, the cutter name & specs from Magnet.net. You can also call them at 1(800) 827-2316.

- #2704: Surface Cutter, 1 1/4" diameter, 1/2" shank
- #763: 60 Degree/V-Grooving, 5/8" diameter, 1/2" shank
- #706: 90 Degree/V-Grooving, 1" diameter, 1/2" shank
- #2104: End Mill Down Spiral, 1/4" diameter, ¾" cut length, 1/4" shank
- #2105: End Mill Down Spiral, 1/4" diameter, 1" cut length, 1/4" shank
- #2127: End Mill Down Spiral, 5/16" diameter, 1" cut length, 5/16" shank
- #2005: End Mill Up Spiral, 1/4" diameter, 1" cut length, 1/4" shank
- #2240: Compression Up-Down Spiral, 3/8" diameter, 1" cut length, 3/8" shank
- #6105: T-Slot, 5/8" diameter, 3/16" kerf, 1/4" shank
- #1509: Extra Deep Core Box, 1/2" diameter, 1" cut length, 1/2" shank
- #1503: Extra Deep Core Box, 1/4" diameter, 3/8" cut length, 1/4" shank
- #3954: Classic Spiral, 1 1/2" diameter, 1/2" shank

Collets:

Precision collets come in different sizes based on the Spindle size or Toolholder size. For 3HP spindles we use a “ER20” collet which can range shank sizes between 1mm - 9/16”. For 6HP & 11HP spindles we use an “ER 32” collet which can range shank sizes between 1mm - 7/8”. We recommend getting collets from maritool.com. If you have an Automatic Tool Change spindle, we recommend you purchase multiple collets of the same size. Especially, the ¼" & ½" collets.

Listed are the collet sizes that will be used during the training courses 1 & 2.

ER20 Collets	ER32 Collets
1/4"	1/4"
5/16"	5/16"
3/8"	3/8"
1/2"	1/2"

Double Stick Tape:

Before you have the chance to make table fixtures you will need a way to hold down parts during training course 1. To get started we recommend using ¾" wide [Nitto Multi-Purpose Double-Sided tape](#), or [JVCC Double-Sided tape](#).

Grease Gun:

To maintain the lubrication of the linear bearings you will need a grease gun. We recommend the [Lock-N-Lube Grease Gun](#).

Grease:

If you have a Maverick 4' wide, Renegade 5' wide CNC machine, the grease required to lubricate the linear bearings is very specific. You will need [Shell Gadus S3 V220C 2 Grease](#).

Dry Grease:

To properly maintain the toolholders the spindle manufacture has required we use a specific [dry grease](#) product listed in their manuals. [CRC Dry PTFE Lube](#).