

# Woodworking

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# Onefinity Elite Gen 2 CNC

Documentation for the Onefinity Elite Gen 2 Foreman CNC router — hardware, software, job prep, operation, speeds/feeds, and safety.

# Onefinity Elite Gen 2 CNC Router

## Onefinity Elite Gen 2 CNC Router

Onefinity Elite Gen 2 Foreman

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: **#class-requests**

**Workflow:** (1) Design at home in VCarve Makerspace client edition → (2) Post-process toolpaths at the shop on master VCarve → (3) Run the job on the **dedicated CNC shop PC** via RTS-X. Never drive the machine from a personal laptop.

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| Model                | Onefinity Elite Gen 2 <b>Foreman</b> (48×48 / ~49×49" cut area)     |
| Spindle              | Redline 80mm 1.5kW air-cooled, 110V, ER20 collet (up to 1/2" shank) |
| Controller           | RealTime CNC (RTS-X) - shop PC only (no built-in HMI touchscreen)   |
| Date Purchased       | <b>TBD</b>                                                          |
| Status               | Operational                                                         |
| Link To Manual       | <a href="#">Onefinity Support - Gen 2 Elite</a>                     |
| Link to product page | <a href="#">Gen 2 Elite Series</a>                                  |

### Quick Reference

| Category       | Details                                                                                                                                                             |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Critical rules | Training required • Dedicated CNC shop PC only - no personal laptops • Never leave the machine unattended while cutting • Wood and plastics only - <b>no metals</b> |

| Category    | Details                                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------------------|
| Key numbers | ~49×49" cut area • ER20 collet, max 1/2" shank • Max ~1.5" bit diameter (VFD fault risk) • 3/4" spoilboard thickness |
| Workflow    | Design at home (VCarve client) → Export G-code at shop (VCarve master) → Run job at shop (RTS-X on CNC PC)           |
| Get help    | Slack <a href="#">#woodworking</a> • <a href="#">Onefinity support</a> • <a href="#">RTS-X docs</a>                  |

## Description

Our Onefinity Elite Gen 2 Foreman is a large-format CNC router for precision 2D and 3D cutting in wood and plastics. Members design projects at home in VCarve, generate toolpaths at the shop, and run jobs on the dedicated CNC computer using RTS-X. This machine replaces our retired [homemade CNC router](#).

## Documentation

**New to this machine?** Start with Safety Rules and read the pages in order - each page links to the next.

- [Safety Rules](#)
- [Hardware and Machine Anatomy](#)
- [Software: VCarve and RTS-X](#)
- [Speeds and Feeds](#)
- [Preparing a Cut File](#)
- [Running a Job](#)
- [Maintenance and Troubleshooting](#)

## Additional Resources

- [Onefinity manuals and support](#)
- [RTS-X documentation](#)
- [VCarve Pro Makerspace Edition](#)

**TBD:** Shop photos of installed machine, T-tracks, spoilboard, and control station.

Next: [Safety Rules](#) →

# Safety Rules

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## Safety Rules

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**Read this before operating the machine.** These rules apply every time you use the Onefinity CNC - no exceptions.

- **Training required** - members only; request class on Slack **#class-requests**
  - **Never leave the machine unattended** while cutting
  - **Approved materials:** wood and plastics only - **no metals**
  - Dust and chip hazards; fire risk from fine wood dust - **especially important until dust collection is installed**
  - **E-stop** stops machine motion and spindle; does not shut down the shop PC
  - Wear safety glasses; hearing protection recommended
- 

[← Hub](#) | Next: [Hardware and Machine Anatomy](#) →

# Hardware and Machine Anatomy

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## Hardware and Machine Anatomy

### Manufacturer Specifications (Gen 2 Foreman)

- **Cut area:** ~49" × 49<sup>7</sup>/<sub>8</sub>" (1245 × 1248 mm)
- **Z travel (Z-20 slider):** ~165 mm (~6.5")
- **Gantry clearance:** up to ~160 mm depending on Z-slider mount height
- **Motion:** closed-loop steppers; 60 mm X rail / 50 mm Y rails
- **Spindle:** [Redline 80mm 1.5kW air-cooled](#) - ER20 collet (up to 1/2" shank); max ~1.5" bit diameter recommended
- **Power:** 110V spindle

### Our Setup (Makerspace)

| Setting             | Value             | Implication                                                                                                                  |
|---------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Z-20 mount position | Highest position  | Maximizes gantry clearance (~160 mm) but <b>reduces</b> effective Z reach to the spoilboard - plan job thickness accordingly |
| Spoilboard          | 3/4" (19 mm)      | Include in Z-zero and max cut depth calculations; resurfacing removes material over time                                     |
| Workholding         | T-tracks          | Use T-track clamps and fixtures (no vacuum table)                                                                            |
| Dust collection     | Not installed yet | Coming very soon - use shop vac / manual cleanup until installed                                                             |

Effective max work height also depends on spindle position in the mount and bit stick-out. Tall workpieces may eventually require lowering the Z assembly (trading gantry clearance for more Z reach).

**TBD:** Exact effective max cut height measurement for our current mount + spoilboard setup.

# Bits and Collets

The spindle uses an **ER20 collet system**. Collet size must match your bit’s shank diameter exactly - using the wrong size collet is a safety hazard.

| Spec               | Value                 | Notes                                                                                |
|--------------------|-----------------------|--------------------------------------------------------------------------------------|
| Collet type        | ER20                  | Standard ER20 collets; select size to match bit shank diameter exactly               |
| Max shank diameter | 1/2" (12.7 mm)        | Largest ER20 collet size; do not attempt larger shanks                               |
| Max bit diameter   | ~1.5"                 | Larger bits have excess rotational mass and can fault the VFD - avoid                |
| Installation       | Two wrenches required | One wrench on the spindle flat, one on the collet nut; never run with a loose collet |

Install and tighten the bit **before** any spindle power. Always inspect the collet for wear or damage before use; replace if needed.

## Component Glossary

| Component        | What it is                                                        | Controlled by                                                    |
|------------------|-------------------------------------------------------------------|------------------------------------------------------------------|
| Spindle          | Motor that spins the cutting bit                                  | VFD + RTS-X                                                      |
| VFD              | Variable Frequency Drive - converts power and sets spindle RPM    | RTS-X (must <b>not</b> be in manual/local mode during jobs)      |
| Z-20 slider      | Heavy-duty vertical axis assembly                                 | RTS-X motion firmware                                            |
| RTS-X controller | Real-time motion controller (closed-loop on Elite)                | RTS-X firmware                                                   |
| Shop PC          | Dedicated CNC computer at the makerspace                          | RTS-X Windows app ( <i>sole interface - no HMI touchscreen</i> ) |
| VCarve Pro       | CAM/design software - creates toolpaths, does not run the machine | Separate from RTS-X                                              |

**Note:** This machine does **not** have the optional Redline HMI touchscreen. All homing, zeroing, file import, simulation, and job execution happen through RTS-X on the dedicated shop PC.

**TBD:** Physical layout diagram - shop photos of spindle, VFD, e-stop, shop PC station, and work area. Link stock Onefinity manual diagram until then.

**TBD:** Shop-specific power outlet / breaker labeling.



# Software: VCarve and RTS-X

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## Software: VCarve and RTS-X

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### Getting Access

1. Request CNC training on Slack: **#class-requests**
2. Complete the CNC checkout/training class
3. After checkout, an admin sends your **Vectric/V&Co Makerspace invite** so you can use the VCarve client edition at home

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Two separate software systems are involved: **VCarve Pro** for design and toolpath generation, and **RTS-X** for actually running the machine.

### VCarve Pro Makerspace Edition

Our makerspace uses [VCarve Pro Makerspace Edition](#). Members get a free client license for home use after training.

#### At home (Client Edition)

1. Install VCarve Pro from [Vectric](#)
2. Sign in with your V&Co account after accepting a makerspace invite
3. Design your project and run 3D preview/simulation
4. Save your `.crv` project file
5. **Cannot** save toolpaths or G-code from home - that requires the shop master edition

#### At the shop (Master Edition)

- Licensed on makerspace computers (up to 5 installs)
- **Installed on:** the dedicated CNC computer(s) **and** the vinyl cutter computer
- Open the member's `.crv` file (USB or cloud)
- Verify tooling and machine profile
- **Save toolpaths** → export G-code
- Transfer G-code to the dedicated CNC PC running RTS-X

#### Helpful links:

- [Vectric Makerspace login docs](#)
  - [Vectric Makerspace overview video](#)
- 

## RTS-X (Realtime CNC)

**RTS-X is the only software that runs the machine.** It handles homing, zeroing, spindle control, file import, simulation, and job execution.

- **Rule:** Always drive the machine from the **dedicated CNC shop PC** - never from a personal laptop or phone
- **No HMI:** We do not have the optional Redline touchscreen; the shop PC is the sole control interface

### Documentation and downloads:

- [RTS-X Documentation Hub](#)
- [System Overview](#)
- [Settings reference](#)
- [Software downloads and updates](#)
- [Onefinity - Redline / Realtime Controller Manual](#)
- [Realtime Resources FAQ](#)

See also: [Preparing a Cut File](#) for post-processor setup.

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← [Hardware and Machine Anatomy](#) | Next: [Speeds and Feeds](#) →

# Speeds and Feeds

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## Speeds and Feeds

Use this page as a reference when setting up toolpaths in VCarve. Start conservative - increase feed rate only after successful test cuts on scrap material. Match RPM to material type and bit diameter.

**1.5kW spindle limit:** Avoid bits larger than ~1.5" diameter - excess rotational mass can fault the VFD.

### Starter Values (Not Yet Shop-Verified)

Values below are placeholders derived from manufacturer guidance and Vectric defaults. They will be replaced after test cuts at the makerspace.

| Material | Bit type        | Diameter | RPM | Feed (IPM) | Depth/cut | Notes                        |
|----------|-----------------|----------|-----|------------|-----------|------------------------------|
| Hardwood | Up-cut end mill | 1/4"     | TBD | TBD        | TBD       | From manual - verify at shop |
| Plywood  | Up-cut end mill | 1/4"     | TBD | TBD        | TBD       | From manual - verify at shop |
| MDF      | Up-cut end mill | 1/4"     | TBD | TBD        | TBD       | From manual - verify at shop |
| Plastic  | Up-cut end mill | 1/4"     | TBD | TBD        | TBD       | From manual - verify at shop |

**TBD:** Shop-verified speeds and feeds after test cuts. Rows will be tagged "shop-verified" when confirmed.

### General Guidance

- Always confirm units (IPM vs mm/min) match your G-code post-processor
- Use VCarve’s tool database as a starting point, then verify on scrap material
- Reduce depth per pass if you hear chattering or see poor chip evacuation

- Refer to bit manufacturer recommendations for your specific cutter
- 

← [Software: VCarve and RTS-X](#) | Next: [Preparing a Cut File](#) →

# Preparing a Cut File

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## Preparing a Cut File

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### Design at Home Checklist

1. Confirm project units (**inches vs mm**) - must match your post-processor choice
2. Set up the correct **machine profile** in VCarve (per the [Ofinity + Vectric setup guide](#)):
  1. VCarve → **Machine** → **Machine Configuration Management**
  2. Click **Download from the Cloud** (upper-right corner) → Yes
  3. Manufacturer: **Ofinity**
  4. Series: **Elite Redline** (correct for Gen 2 Redline/Realtime)
  5. Model: **Foreman 48×48**
  6. Configuration: **Defaults** (unless rotary added later)
  7. When saving toolpaths, choose: **Ofinity Redline/Realtime (inch)** or **(mm)** - match your project units

Backup/manual post-processors: [RealTime CNC](#)

3. Design your part and assign toolpaths - see [Speeds and Feeds](#) for starter values
4. Run **3D preview / simulation** in VCarve - check for unexpected plunges, tabs, and rapid collisions
5. Save your  project and bring it to the shop via **USB drive or cloud** (either works)

### At the Shop - Export Toolpaths

1. Open your  file on a **master VCarve** computer (CNC PC or vinyl cutter PC)
2. Re-check tooling and run 3D preview again
3. **Save toolpaths** → export G-code with the correct post-processor
4. Transfer G-code to the dedicated CNC PC running RTS-X (USB or cloud)

Once G-code is on the shop PC, continue to [Running a Job](#) for simulation, machine startup, and job execution.

# Running a Job

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## Running a Job

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Follow this checklist every time you run a job. Complete [Preparing a Cut File](#) and have your G-code on the shop PC before starting.

### Before Power-On (Safety-Critical)

- **Install and tighten the bit first** - before any spindle power; see [Hardware and Machine Anatomy](#) for collet and installation details
- Select the correct **ER20 collet** for your bit's shank diameter
- Use **two wrenches** on the spindle nut; never run with a loose collet
- Clear the spoilboard area and confirm your workholding plan
- Wear safety glasses; hearing protection as needed
- Know the **e-stop** location

### Power-Up Sequence

1. Verify **e-stop** is released
2. Turn on main machine power
3. Turn on **VFD**; confirm it is in **automatic/remote mode** (NOT manual/local)
4. Boot / wake the dedicated CNC shop PC; launch **RTS-X**
5. Connect to the controller; **home the machine**

**Dust collection not yet installed** - use shop vac for cleanup after cuts. Dust collection is coming soon.

**TBD:** Preferred power-down order (VFD → main power). Shop-specific e-stop / power switch labeling.

### Job Setup

#### 1. Secure the workpiece (T-tracks)

- Use **T-tracks** with appropriate clamps, hold-downs, or toe clamps
- Screwing into the 3/4" spoilboard is acceptable when clamps won't work - avoid excessive holes
- Keep clamps and track hardware **clear of the toolpath** - check rapids in simulation
- Mind "no-go" zones near table edges where tracks may not reach

## 2. Set work zero (WCS)

Standard practice for most jobs:

- **XY zero:** front-left corner of your workpiece - match the origin you set in VCarve
- **Z zero:** top surface of the material (most common), or spoilboard surface for through-cuts - match your VCarve setting
- In RTS-X: jog the bit to your XY zero point and zero the X and Y axes; lower the bit to just touch the material surface and zero the Z axis
- Use a paper slip or touch-off block for Z precision; avoid crashing the bit into the spoilboard

**TBD:** Document our specific step-by-step touch-off procedure in RTS-X, with screenshots. Spoilboard is **3/4"** thick.

## 3. Import G-code into RTS-X (USB or cloud)

## 4. Run simulation/preview in RTS-X

- Open the file in **RTS-X** and run the built-in preview/simulation before starting
- Confirm the bit does **not plunge through material or into clamps/fixtures** on the first rapid approach
- Verify the toolpath boundaries stay within your workholding setup
- Check that the first plunge point and rapid moves look correct relative to your zeroed position
- Consider watching the first few seconds of the cut at **reduced feed override (e.g. 50%)** until you are confident the job is running correctly

## 5. Position spindle over safe start point; confirm feed/speed in file

## During the Cut

- **Remain at the machine and supervise the entire job.** Zero tolerance for leaving unattended or leaving the room.
- Keep hands clear; never adjust clamps while the spindle is running
- Be ready to hit **e-stop** or feed-hold

## Shutdown

1. Stop spindle; return to safe park position if applicable

2. Remove workpiece and clean up
  3. Vacuum chips; check spoilboard for damage
  4. Power down VFD, then main power
  5. Log any issues on Slack
- 

← [Preparing a Cut File](#) | Next: [Maintenance and Troubleshooting](#) →

# Maintenance and Troubleshooting

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## Maintenance and Troubleshooting

### Maintenance

- **Collet:** Clean and inspect regularly; replace if worn or damaged
- **Spoilboard:** 3/4" board - monitor thickness as holes and resurfacing accumulate; resurface when uneven
- **Dust collection / dust shoe: TBD** - coming soon; add maintenance steps when installed
- **Linear rails:** Wipe down per Onefinity manual
- Report problems on Slack or to a shop officer

### Troubleshooting

| Symptom                     | Likely cause                                    | Action                                                         |
|-----------------------------|-------------------------------------------------|----------------------------------------------------------------|
| VFD fault on start          | Manual mode, wrong startup order, oversized bit | Check VFD is in remote/auto mode; press reset; verify bit size |
| Homing fails                | Obstruction, e-stop engaged, limit switch       | Clear axis path, release e-stop, re-home                       |
| Wrong cut size              | Inch/mm post-processor mismatch                 | Re-export G-code with correct post-processor                   |
| Crashes into clamps         | Wrong zero or skipped simulation                | Re-zero work coordinates, re-run RTS-X simulation              |
| Loose collet / bit pull-out | Insufficient tightening                         | Stop job; re-seat bit with two wrenches                        |

**TBD:** Dust collection troubleshooting once system is installed.

# JET Dust Collector

# JET Dust Collector

Dust Collector

[717515\\_main\\_23ca\\_1.png](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                           |
|----------------------|---------------------------|
| Model No             | JCDC-1.5                  |
| Date Purchased       | —                         |
| Status               | Operational               |
| Link To Manual       | <a href="#">PDF (JET)</a> |
| Link to product page | <a href="#">JET Tools</a> |

## Description

The JET JCDC-1.5 is a 1.5 HP cyclone dust collector that captures wood dust and chips at the source. The cyclone design separates most debris into the collection bin before air passes through the filter, which keeps the filter cleaner and improves suction. Use it with the table saw, planer, jointer, and other woodworking tools to maintain clean air and protect the shop. This unit runs on 115V. Designed for wood dust only - **do not use for metal or other materials.**

## Additional Resources

- [JET JCDC-1.5 Operating Instructions and Parts Manual \(PDF\)](#)

# Laguna Band Saw

# Laguna Band Saw

Band Saw

[PXL\\_20260111\\_033640135\(1\).jpg](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                              |
|----------------------|------------------------------|
| Model No             | 14-twelve                    |
| Date Purchased       | 12/2025                      |
| Status               | Operational                  |
| Link To Manual       | <a href="#">ManualsLib</a>   |
| Link to product page | <a href="#">Laguna 14-12</a> |

## Description

The Laguna 14|12 is a 14" bandsaw for curved and straight cuts and resawing. It has a 1.75 HP motor, 13" resaw capacity, and ceramic blade guides. Use it for cutting curves, re-sawing lumber into thinner stock, and general band-saw work in the wood shop.

## Additional Resources

- [Laguna 14|12 / 14BX Series manual \(ManualsLib\)](#)

# SawStop Table Saw

## SawStop Table Saw

Table Saw

[PXL\\_20241116\\_191344247\(1\)\(1\).jpg](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                                |
|----------------------|--------------------------------|
| Model No             | PCS175                         |
| Date Purchased       |                                |
| Status               | Operational                    |
| Link To Manual       | <a href="#">PDF (SawStop)</a>  |
| Link to product page | <a href="#">SawStop PCS175</a> |

### Description

The SawStop PCS175 is a 10" professional cabinet saw with the SawStop safety system, which stops the blade when it contacts skin. Use it for rip cuts, crosscuts; **no dados**. Always keep the safety system enabled and request training before use.

### Additional Resources

- [PCS175 Owner's Manual \(PDF\)](#)

# Bosch Table Saw

## Bosch Table Saw

Table Saw

[14935167.jpg](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                             |
|----------------------|-----------------------------|
| Model No             | 4100                        |
| Date Purchased       | —                           |
| Status               | Operational                 |
| Link To Manual       | <a href="#">PDF (Bosch)</a> |
| Link to product page | <a href="#">Bosch Tools</a> |

### Description

The Bosch 4100 is a portable 10" jobsite table saw with a folding stand. It handles rip cuts, crosscuts, and bevel cuts. Good for sheet goods and dimensional lumber; use the guard and riving knife for safe operation.

### Additional Resources

- [Bosch 4100 Operating/Safety Instructions \(PDF\)](#)

# DeWalt Miter Saw

## DeWalt Miter Saw

### Miter Saw

#### Tool image

This tool can be used by members and non-members who are well-versed in the operation of the tool. Trainings can always be requested at [#class-requests](#) on Slack

|                      |                               |
|----------------------|-------------------------------|
| Model No             | DWS779                        |
| Date Purchased       | —                             |
| Status               | Operational                   |
| Link To Manual       | <a href="#">PDF (DeWalt)</a>  |
| Link to product page | <a href="#">DeWalt DWS779</a> |

### Description

The DeWalt DWS779 is a 12" double-bevel sliding compound miter saw for crosscuts and angled cuts. Use it for trim, framing, and any project requiring precise miters or bevels. Keep the blade guard in place and secure work before cutting.

### Additional Resources

- [DWS779 Instruction Manual \(PDF\)](#)

# JET Drill Press

## JET Drill Press

### Drill Press

[354170\\_main\\_a9de.png](#)

This tool can be used by members and non-members who are well-versed in the operation of the tool. Trainings can always be requested at [#class-requests](#) on Slack

|                      |                              |
|----------------------|------------------------------|
| Model No             | JDP-20MF                     |
| Date Purchased       | —                            |
| Status               | Operational                  |
| Link To Manual       | <a href="#">PDF (JET)</a>    |
| Link to product page | <a href="#">JET JDP-20MF</a> |

### Description

The JET JDP-20MF is a 20" floor drill press with 12 spindle speeds (150–4,200 RPM) and a 1.5 HP motor. Use it for accurate vertical drilling in wood, metal, and plastic. Select the correct speed for the material and bit size, and clamp work when needed.

### Additional Resources

- [JDP-20MF Operating Instructions and Parts Manual \(PDF\)](#)

# Laguna Jointer

# Laguna Jointer

Jointer

[laguna-jxor8-sheartec-ii-jointer-mj8x72p-0130-no-sales-tax-ships-free\\_\\_86460.jpg](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                              |
|----------------------|------------------------------|
| Model No             | MJ8X72P-0130                 |
| Date Purchased       | 2022/08                      |
| Status               | Operational                  |
| Link To Manual       | <a href="#">PDF (Laguna)</a> |
| Link to product page | <a href="#">Laguna JX8</a>   |

## Description

The Laguna JX|8 ShearTec II is an 8" jointer with a 72" bed and parallelogram tables. It flattens one face and squares one edge of rough lumber. The ShearTec II spiral cutterhead runs at 5,500 RPM. Use it to prepare stock before planing or dimensioning.

## Additional Resources

- [JX8 ShearTec II Jointer manual \(PDF\)](#)

# Grizzly Planer

# Grizzly Planer

Planer

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This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                                 |
|----------------------|---------------------------------|
| Model No             | G1021X2                         |
| Date Purchased       | 2022/08                         |
| Status               | Operational                     |
| Link To Manual       | <a href="#">PDF (Grizzly)</a>   |
| Link to product page | <a href="#">Grizzly G1021X2</a> |

## Description

The Grizzly G1021X2 is a 15" planer with a helical cutterhead and 3 HP motor. It thicknesses lumber after one face is jointed flat. Feed rates are 16 and 28 FPM. Use it to bring stock to final thickness; always joint one face first for best results.

## Additional Resources

- [G1021 Owner's Manual \(PDF\)](#)

# Homebrew CNC Router

## Homemade CNC Router

CNC Router

[IMG\\_20220821\\_161928\\_01.jpg](#)

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

**Retired.** This machine is no longer operational. Use the [Onefinity Elite Gen 2 CNC Router](#) instead.

|                      |         |
|----------------------|---------|
| Model No             | N/A     |
| Date Purchased       | —       |
| Status               | Retired |
| Link To Manual       |         |
| Link to product page |         |

## Description

Our homemade CNC router was a computer-controlled router for 2D and 3D cutting in wood, plastic, and soft metals. It has been replaced by the [Onefinity Elite Gen 2 CNC Router](#).

## Additional Resources

- [Onefinity Elite Gen 2 CNC Router](#) (replacement)

# Bauer Belt/Disc Sander

## Bauer Belt/Disc Sander

Belt/Disc Sander

[58339\\_W3.webp](#)

This tool can be used by members and non-members who are well-versed in the operation of the tool. Trainings can always be requested at [#class-requests](#) on Slack

|                      |                                      |
|----------------------|--------------------------------------|
| Model No             | 20106E-B                             |
| Date Purchased       | —                                    |
| Status               | Operational                          |
| Link To Manual       | <a href="#">PDF (Harbor Freight)</a> |
| Link to product page | <a href="#">Harbor Freight</a>       |

### Description

The Bauer 4" x 36" belt and 6" disc sander is a combination benchtop sander. Use the belt for fast stock removal and edge sanding; use the disc for flat faces and end grain. The table tilts for angled work. Keep hands clear of the belt and disc and use a backing block when sanding small pieces.

### Additional Resources

- [Bauer 4x36 Belt/Disc Sander manual \(PDF\)](#)

# Central Machinery Spindle Sander

## Central Machinery Spindle Sander

Spindle Sander

[58546\\_W3.jpg](#)

This tool can be used by members and non-members who are well-versed in the operation of the tool. Trainings can always be requested at [#class-requests](#) on Slack

|                      |                                      |
|----------------------|--------------------------------------|
| Model No             | 58546                                |
| Date Purchased       | —                                    |
| Status               | Operational                          |
| Link To Manual       | <a href="#">PDF (Harbor Freight)</a> |
| Link to product page | <a href="#">Harbor Freight</a>       |

### Description

The Central Machinery 14" oscillating spindle sander has a dual-action spindle (rotation plus oscillation) for sanding curved and contoured surfaces. Use it for inside curves, template work, and edges that are difficult to sand by hand or with a belt sander. Multiple spindle sizes are available; choose one that fits your curve.

### Additional Resources

- [Item 58546 Owner's Manual \(PDF\)](#)

# Shop Fox Wood Lathe

## Shop Fox Wood Lathe

Wood Lathe

Tool image

This tool is restricted to Makerspace Members, and requires a training before use. Request a training on Slack: [#class-requests](#)

|                      |                                             |
|----------------------|---------------------------------------------|
| Model No             | W1758                                       |
| Date Purchased       | —                                           |
| Status               | Operational                                 |
| Link To Manual       | <a href="#">PDF (Shop Fox W1758)</a>        |
| Link to product page | <a href="#">Shop Fox W1758 (ManualsLib)</a> |

### Description

The Shop Fox W1758 is a floor **wood** lathe with digital readout (DRO) for spindle work, bowls, and turning projects. This is not the metal lathe. Training, face shield, and proper tool rest setup are required.

### Specifications

|                          |                                         |
|--------------------------|-----------------------------------------|
| Swing over bed           | 16 in                                   |
| Distance between centers | 46 in (with stand)                      |
| Motor                    | 2 HP, TEFC capacitor-start, 1725 RPM    |
| Speed control            | Variable speed + DRO                    |
| Power                    | 115/230 V, single-phase (~14 A @ 115 V) |
| Approx. weight           | 287 lb (machine)                        |

### Additional Resources

- [W1758 owner manual \(PDF\)](#)