

Model 43 | CNC Machining Centers

3 Axis



THERMWOOD

3 Axis

Model 43

MADE IN USA 

The Multi-Purpose Three Axis Series are highly flexible, making them ideal for a variety of manufacturing applications, wood, plastic sheets, nonferrous metals, aluminum, etc..

This system includes quality features seldom, if ever, found at this price point including full stress relieved weldments, high-end Siemens drives throughout, THK rails and three-dimensional volumetric position compensation, not available from anyone else in this market.

Thermwood CNC Machining Centers

Standard Features

- 12 HP (9 kw) HSD Spindle (3,000-24,000 RPM)
- 11 Position Bar Style Automatic Tool Changer
- SuperControl
- Fixed Steel High Flow Table with Moving Gantry
- Siemens Intelligent Servo Drives Throughout
- 3-D Laser Compensated Axis Alignment
- Control Networking
- Control Nesting
- Machine Training and Installation



Model 43
61" x 145" (1.5m x 3m) Table

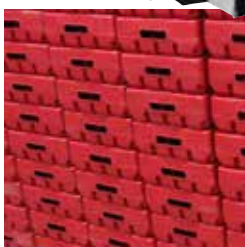
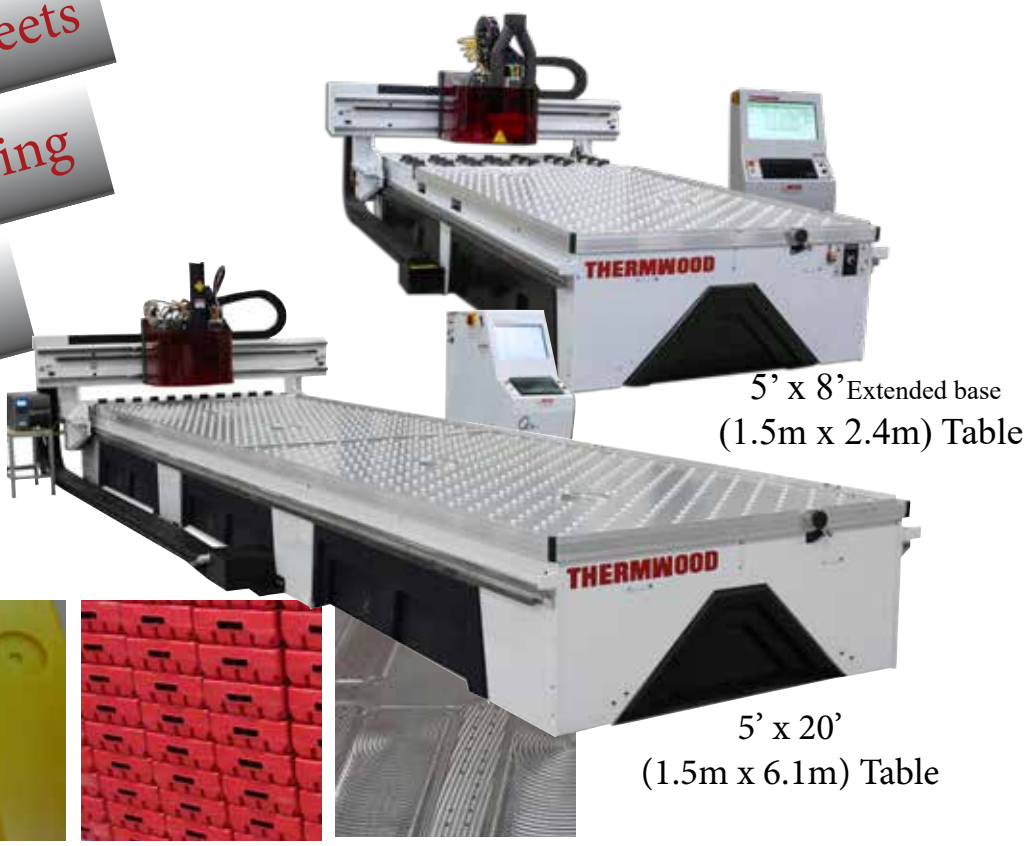
Table Sizes Available

- 4' x 8' (1.2m x 2.4m) Table
- 5' x 8' extended base (1.5m x 2.4m) Table
- 5' x 10' (1.5m x 3.0m) Table
- 5' x 10' extended base (1.5m x 3.0m) Table
- 5' x 12' (1.5m x 3.6m) Table
- 5' x 20' (1.5m x 6.1m) Table



THERMWOOD

Machining Plastic Sheets
 Solid Surface Processing
 Non-Ferrous Metals
 Composites



Machine Standard Features/Options

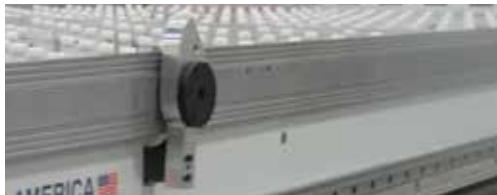


12 HP (9kw) Spindle

A direct driven spindle with a speed range up to 24,000 RPM. The High Frequency Spindle is cooled with an electric fan for quieter running and contains ceramic bearings for longer life and for less maintenance. The 12 HP (9 kw) spindle provides the user with a heavy duty, precision spindle which provides high performance and reliability. **Standard**

Pop-Up Pins

Guides mounted to the table perimeter for locating sheets of material. They are flipped to the up position to locate the material and then retracted to clear during the machining cycle. **Standard**



Bar Style Automatic Tool Changer

Mounts behind the rear of the table and hold the tapered tool holders. When the program calls for a tool change, the head moves back and places the tool into an empty space, it then moves over and picks up the appropriate tool, and then continues the program. **Standard**

Automatic Tool Length Sensor

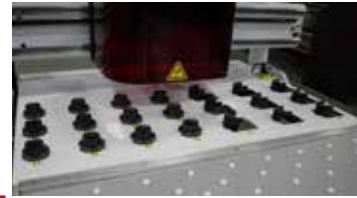
Provides an automatic method of measuring tool length and entering tool length offset numbers into the control. This automatically compensates for the new tool length eliminating the need to precisely locate the cutter bit. It provides a highly accurate method of adjusting tool length for pocketing or profile edges. **Standard**



Machine Options Additional options available

21 Position Bar style Tool Changer

21-position Bar Style Automatic Tool Changer is available on machine with an extended base. This tool change gives ample space to provides (12) twelve 2" tool holder positions, and (9) nine 3" positions.



Automatic Lubrication / Greaser Systems

Provides positive pressure, air/oil lubrication to the linear trackway bearings and the ball screws. This has two major benefits. First, it eliminates the lubrication points which must be serviced each shift. Second, it provides positive pressure to the bearing preventing contamination from entering the bearing. This allows the machine to function in difficult, dusty or hostile environments.

Unload Rake System

The Unload Rake System is mounted directly to the side of the spindle. After the trimming process is complete the machine head will move to the back of the machine and the rake is lowered. The rake pushes the finished product off the front of the machine to a sorting table.



Personal Pause Button

Thermwood has developed a remote wireless "Pause Button" which can be clipped to a belt or pocket. Pressing this button stops the machine in place.

Pause Mat

Placed around the front perimeter of the machine. Once the mat is stepped on the machine will stop operation.



Automatic Labeler

The Automatic Labeler prints black and white labels for the nested program and automatically labels the material prior to machining. The printer is located next the machine and the labeler is mounted to the machining head.

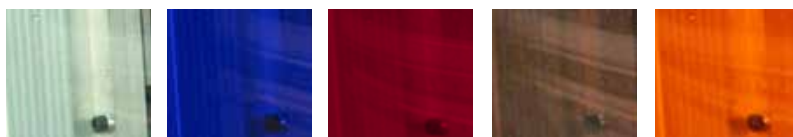
Vacuum Pump

Universal Vacuum System is a unique method for holding panels to the table top for machining. A sheet of particleboard or low density MDF is used as a work surface on the top of the table. The high flow pump vacuums through the work surface holding the part to the table. Pump 15 HP (11 kw). (Conventional also available)



Customized Color

The Model 43 is available with any of five accent colors on the transparent tooling shield and control side panel. A sheet metal control side panel (in painted machine color) is also available in place of the accent colored control side panel.



Green Glass Cobalt Blue Ruby Red Copper Gray Tech Orange



SuperControl

Thermwood's SuperControl

Thermwood, the only major CNC router manufacturer that designs and builds its own CNC control, is a leader in implementing advanced control technology. The SuperControl incorporates more advanced control features than any other CNC control in the industry. And, because Thermwood provides all the technology, you have single source responsibility. Thermwood stands behind and supports the entire system and when new technology is available it can easily be upgraded.



Thermwood's SuperControl

- **Full Multi-tasking Control-** Uses Microsoft® Windows® 10 operating system, offering the ability to operate the machine and do other tasks on the control
- **Huge File storage-** 1 TB hard drive for storage and greater file execution with no delays.
- **Direct Link-** Accepts raw design files or CNC programs, compatible with virtually all design softwares.
- **Virtual Service-** Direct, live, visual contact to Thermwood's Service Department. (Optional)
- **Tool Management-** Keeps track of tool usage and automatically replaces it when needed
- **Maintenance Alerts-** Alerts you when lubrication or maintenance is needed.
- **Videos and Manuals-** Step by step how-to-videos to adjust, maintain and repair your machine. Electronic manual, with error reporting and dynamic 3-D assembly drawings with part numbers.

SuperControl Options Additional options available



Bar Code Input

This option includes a bar code which attaches to the side of the control cabinet. The bar code functions just like a key sequence from the keyboard. For example, the entire key sequence needed to load a program can be scanned as a bar code much faster that it can be typed, with little possibility of error. The bar code input system allows any commonly used key sequence to be printed or scanned.

Hand Held Terminal

Powerful tool for creating, modifying, editing and refining CNC programs at the machine. Programs can be debugged or created right at the machine. The machine moves right with the programming so you can see the exact position. Modifications can be made quickly, errors are minimized saving time.



CabinetShop 43

CNC Router Package for the Professional Cabinet Shops

- Packages combine all the elements needed to design and machine custom cabinets, closets, and furniture products.
- Thermwood CNC Routers are also compatible with most major CAD/CAM and design software.



Table Sizes Available

- 4' x 8' (1.2m x 2.4m) Table
- 5' x 10' (1.5m x 3.0m) Table
- 5' x 12' (1.5m x 3.6m) Table
- 5' x 20' (1.5m x 6.1m) Table

CabinetShop 43
5' x (1.5m x 3.0m) Table

Standard Features

- 12 HP (9 kw) HSD Spindle (3,000-24,000 RPM)
- 11 Position Bar Style Automatic Tool Changer
- SuperControl
- Fixed Steel High Flow Table with Moving Gantry
- Siemens Intelligent Servo Drives Throughout
- 3-D Laser Compensated Axis Alignment
- Control Networking
- Control Nesting
- Machine Training and Installation
- Automatic Labeling System (optional)
- Unload Rake (optional)

Package Features

- **Control Nesting** - A user friendly nesting package integrated into the Thermwood control to nest various parts into sheet stock, thus creating a better yield. Also, accepts layered DXF files.



- **eCabinet Systems** - Sophisticated design software for cabinets, closets and furniture, that generates a CNC output file to be machined.



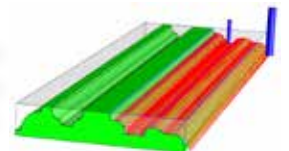
- **Color Coded Labels** - Prints a color bar on each label with a different color for each cabinet. This offers a significant productivity improvement.

Parts:	Top 1	
Cabinet:	5th Corner Framed-MOD1	
Materials:	3/4 Generic	
Jobs:	assembly	
E-Banding:	None	
Sheet #: 1	Part #: 1	Cabinet #: 1

- **Assembly Marks** - Machined assembly marks into each joint which define how parts mate. These marks are hidden once the parts are assembled.



- **Profile Modeler** - Creates modeling type tool path to produce profile edges with standard modeling tools.



Software



Thermwood has a sales and support group that focuses on software products that work with and enhance the operation of Thermwood CNC routers. Their goal is to offer to Thermwood customers the most effective software products for their specific application, smoothly integrated with the control. You can be certain that software obtained from Thermwood will work properly with your Thermwood CNC router. (Thermwood machines can link with all major CAD/CAM softwares.)



PANELMETRIX
MDF DOOR PRODUCTION SOFTWARE

Thermwood is your best source for software products for the following reasons:

- **Thermwood understands the application:** Thermwood knows how the package works with our machines.
- **We've solved the integration problems:** The package works from the software to the computer and then to the CNC control.
- **Our integrated training:** Thermwood offers training of the software and how it works with the control.
- **Thermwood software support:** Thermwood can provide support for the software package, the control and, most important the operation of the two together.
- **Multi-package integration:** Thermwood knows how to make them work together for your application
- **Professional evaluation:** When you purchase software from Thermwood you know that it was fully evaluated and it works.

Thermwood Technical Service

Thermwood's Technical Service offers a wide range of services for our customers to be comfortable and profitable with their CNC Router System. Each Thermwood CNC router system includes formal, structured training classes including professional support material and hands-on experience.

In addition to Thermwood's professional phone support and on-site service, we offer Virtual Service, which is an audio, video and data link from the machine controller and Thermwood's Service team. When the "Virtual Service" link is established, the customer can see and talk to the Thermwood service technician and the service technician can see, not only the customer, but also all of the critical parameters of the control. Through this link, the control can be diagnosed in real-time while programs are being executed and corrections can be made.

We also offer an On-line Supply Store, extensive Part Inventory, Custom Programming, an Advanced Support Program and a Retrofit and Upgrade Department.

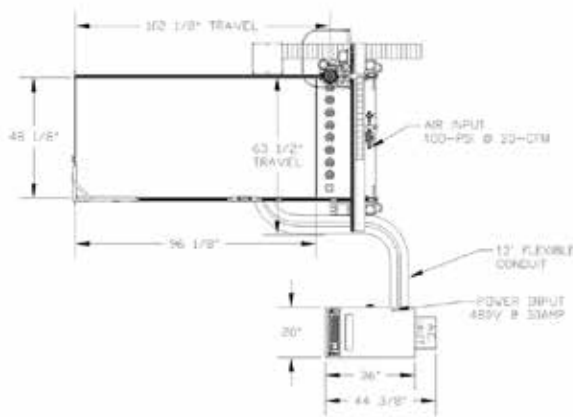
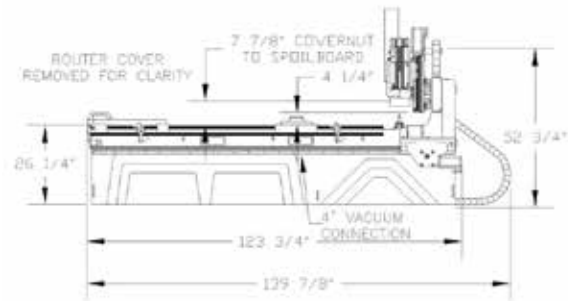
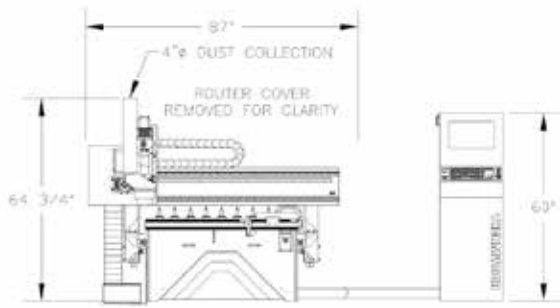
Thermwood's training, "Virtual Service", continuing control updates, and free lifetime phone support offer you support like no one else and assures continuing profits from your Thermwood investment, years into the future.

Thermwood's Service

- **Free Lifetime Phone Support**
- **Virtual Service**
- **On-site Technical Service**
- **Custom Programming**
- **Hands on Training Classes**
- **Professional Set-up**
- **On-line Supply Store**
- **Extensive Parts Inventory**
- **Retrofits and Upgrades**
- **Advanced Support**



Dimensions



Model 43 Overall Dimensions (4' x 8' Table Shown)

4' x 8' Table: Width: 87" Length: 140"

(1.2m x 2.4m Table: Width: 2.2m Length: 3.6m)

5' x 8' Table Extended Base: Width: 99" Length: 188"

(1.5m x 3.0m Table: Width: 2.5m Length: 4.8m)

5' x 10' Table: Width: 99" Length: 188"

(1.5m x 3.0m Table: Width: 2.5m Length: 4.8m)

5' x 10' Table Extended Base: Width: 99" Length: 212"

(1.2m x 2.4m Table: Width: 2.5m Length: 5.4m)

5' x 12' Table: Width: 99" Length: 212"

(1.2m x 2.4m Table: Width: 2.5m Length: 5.4m)

5' x 20' Table: Width: 99" Length: 285"

(1.2m x 2.4m Table: Width: 2.5m Length: 7.2m)

(All tables are 1" greater length and width. Dimensions are approximate)

Thermwood...First in CNC Routers

Thermwood is the first company that developed and manufactured CNC router technology in the US. Starting in the late 60's, Thermwood continues to offer products and software technology for the wood, plastics and aerospace industries, involving numerous areas of machining applications.



The main facility consists of 175,000 square feet which includes both an office/showroom and an engineering and manufacturing plant. Manufacturing utilizes modern fabricating, machining, assembling and testing processes from the machine fabrication to the CNC control production.

Thermwood is an International company that strives in technology, software, support and service to best fit the needs of our customers. Thermwood...the first in CNC routers.



THERMWOOD



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