

# Advanced Support Program

*A Partnership with Thermwood*

## Avoid Obsolescence with Continuing Updates

CNC Router technology has advanced dramatically and the rate of change is increasing. A machine purchased today may be at a competitive disadvantage to newer machines in just a few years. Thermwood is the only CNC router manufacturer that protects you from this danger by offering ongoing system software and hardware updates. The Advanced Support Program offers these updates at the lowest possible cost. The system software update, normally \$2,500 for each update is included free of charge for member companies. Savings on software upgrades alone can easily pay for membership in the Advanced Support Program.

## Service is Virtually Instant

A system called "*Virtual Service*" is provided for members of the Advanced Support Program. "Virtual Service" is a powerful audio and video link, using a standard phone line, between the customer's 91000 SuperControl and the Thermwood service department. 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. It essentially gives the service technician as much information as standing in front of the customer's control itself. Through this link, the control can be diagnosed in real-time while programs are being executed and corrections can be made.

Programming errors can be found and corrected on-line. Customers can typically handle many mechanical problems if they are shown what to do, so videos can be launched by the Thermwood technician to be viewed by the customer. "Virtual Service" can effectively handle most difficulties and problems that occur. This reduces or possibly eliminates a costly service trip, when resolved by a simple phone call. It provides service in minutes instead of days or weeks, reducing both downtime and frustration.

## Nearly Eliminate Service Cost

As a Thermwood customer you already know how incredibly reliable Thermwood machines are, but even healthy people invest in health insurance. As a member of the Advanced Support Program, your 91000 SuperControl is covered by an ongoing limited warranty, both parts and labor. For as long as you remain on the program, all defective control system parts are free. Should you need service labor to repair or replace a control system part, you simply pay for travel expenses and the labor is also free. In fact any service labor required to repair or replace any part of the machine found to be defective is free under the program (Labor Warranties apply to machines which are connected to Virtual Service and reside in the U.S. only). And if you require repair parts, they are available at a 20% discount. A single major problem can easily pay for the program for several years.

Thermwood operates the Advanced Support Program for two purposes, to keep your Thermwood CNC router updated and competitive and to insure against major expenses for repair. The unstated goal underlying the entire program is to do these things at the lowest possible cost to you, the Thermwood user.



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You have purchased your CNC router from the one company dedicated to continuous technical updates, Thermwood. Most CNC control and machine manufacturers want your machine to become old and obsolete so you eventually discard it and buy a new one. The problem is that you may spend many, many years nursing along a machine that really can't compete with the new machines your competitors are buying. Even if it is state-of-the-art when you buy it, it is quickly eclipsed by advancing technology. You are faced with a dilemma. If I don't buy a modern machine I won't be able to compete today and if I do buy one, it will quickly become obsolete and I still won't be competitive.

You have selected the best, most advanced CNC router on the market. Now, maintain your competitive advantage and keep your machine in top working order by joining the Advanced Support Program.

## The Advanced Support Program is the Answer.

Thermwood wants its customers to be the most competitive, most successful companies in the business. If our customers grow because of our machines, they will buy more machines. They will be successful and we will be successful, a great partnership.

Thermwood is in a unique position to support this partnership. We are the only CNC router manufacturer to control all technical aspects of our machines. We build our own controls and maintain an aggressive ongoing technical research and development program. We make certain that new advances can be retrofitted to older machines. Our competitors must purchase their controls from others. These commercial CNC control manufacturers get half or more of their annual revenue from replacing their own obsolete controls in the field. They have little interest in prolonging and enhancing existing controls, so even if the machine manufacturer would like to keep you updated, they can't do it.

## The Advanced Support Program is Simple.

You pay a small ongoing fee for each machine on the program. In return you get software update, free of charge to bring your system up to current standards. If you are not on the program, this update will cost \$2,500. If new hardware is required for future software versions, those components will be quoted at the time of the upgrade. With the software and possibly hardware update you have the same features and performance as a new machine for a tiny fraction of new machine cost. This may mean faster speeds, smoother operation and new control features, but there is even more to the program.

Members are provided with "Virtual Service". With this powerful audio and video link the customer can see and talk to the Thermwood service person and the service person can see, not only the customer, but also all of the critical parameters of the control. It essentially gives the service technician as much information as standing in front of the customer's control itself. The control can be diagnosed in real-time while programs execute. Corrections can be made to the control, programming errors found and corrected, and mechanical problems communicated. Videos, showing how to perform many maintenance functions, can be launched by Thermwood to be viewed by the customer. It reduces service cost but retains highly qualified service people. It provides service in minutes instead of days or weeks, reducing both downtime and frustration.

## 91000 SuperControl

### Special Features:

- Operates on the Windows 2000 Operating System
- Virtual Service
- Multiple Language Support
- Robust file handling
- Webstore access
- Color Display

Repairs



Contact us at  
1-800-221-3865 ext. 251  
[www.thermwood.com](http://www.thermwood.com)

Visit us at [www.thermwood.com](http://www.thermwood.com).

With the purchase of a new machine Thermwood offers a one-year limited parts warranty. There is no cost to correct defects in parts or workmanship during that period although, if a technician is required to travel to your facility you are required to cover the travel expenses. Under the Advanced Support Program this warranty is extended for the control system continuously. At any time should a part on the control system fail, it is covered just as if it occurred during the first year. Drive Modules, Frequency Converters, and Air Conditioners are not part of the full control system warranty.

Those of you who have run Thermwood machines for some time realize that the control is extremely reliable. If it weren't, we would not be able to make this offer. Still, things can and do fail and many times repair or replacement can be quite expensive. You can think of the Advanced Support Program as an insurance policy. For a small premium, an unlikely, but expensive problem can be handled at no cost. But there is more.

In addition to full parts coverage of the control, we offer continuing labor warranty on the control system and the machine (Labor Warranties apply to machines which are connected to Virtual Service and reside in the U.S. only). Should your machine fail for any reason, you can get a qualified technical service representative to travel to your facility for no cost other than travel expenses. This labor warranty does not cover routine maintenance or customer inflicted damage.

In addition, repair parts for all machines enrolled on the program are available at a 20% discount. A single major event can save you the cost of the program for several years.

The Advanced Support Program also has a web site located at [www.thermwood.com](http://www.thermwood.com). This site is designed to explain the program and inform you of what you might be missing with older control software. The site also has a suggestion box where customers that are on the program and also people that are not on the program can give us their suggestions for software enhancements. We want to know your ideas, being first hand users of the 91000 SuperControl, for potential features that could benefit you in your daily operation. There is also a Free Downloads section. This is a place where members can download from a list of Macros, novelty CNC programs and other potentially useful program items. New additions will be added frequently and we are open to any suggestion from members as to new items for the Free Downloads page.

The Advanced Support Program is available for any Model 40, 42, 53, 67 or 70 equipped with a current 91000 SuperControl for \$225.00 monthly per machine or annually or every five years at a discounted rate (reference the payment chart below.)

Should you wish to enroll an older machine in the program, it will be necessary to first bring the system up to current. It should be

noted that the Thermwood Control software is released as a stepping stone update. This means that any releases missed while not being a member of the Advanced Support Program will have to be purchased

<u>Machine Qty.</u>	<u>Annual Fee</u>
1 .....	\$2,500.00 per machine
2 to 5 .....	\$2,250.00 per machine
Over 5 .....	Contact Thermwood
<u>Machine Qty.</u>	<u>5 Year Fee (5 year for the price of 4 years)</u>
1 .....	\$10,000.00 per machine
2 to 5 .....	\$9,000.00 per machine
Over 5 .....	Contact Thermwood

Machine quantities are based on single site locations.

before you can join the program and obtain the latest release. So, keep in mind, the longer you wait to upgrade your machine, the more expensive it will be. The least expensive path is to join the program when you buy your machine and then simply remain on it. Your machine will constantly improve, you will become consistently more competitive and you will assimilate new technology on an easy-to-handle continuous basis.

That's the Advanced Support Program. Designed to keep you competitive, designed to handle problems and designed to do both at the lowest possible cost. With this program Thermwood is joining in partnership with its customers. The fees collected are intended not only to fund the program but also to help fund an even higher level of

### To Summarize, Machines enrolled in the program shall receive:

- **Virtual Service**
- **Free software upgrades.**
- **SuperControl warranty on parts.**
- **Free on-site service labor to repair or replace any part of the machine or control proven to be defective.**  
(Applies to machines which are connected to Virtual Service and reside in the U.S. only)
- **20% discount on replacement machine parts from our field service department.**
- **Free internet downloads of macros, novelty CNC programs and other useful items**

research and product development, which is then used to update the very machines that funded the effort. We at Thermwood believe that with the Advanced Support Program everyone is the winner. We become even stronger in our market because of loyal customers. Our customers become stronger in their market because they are using the most advanced state-of-the-art technology available.

You have selected the best, most advanced CNC router on the market. Now, maintain your competitive advantage and keep your machine in top working order by joining the Advanced Support Program.

**Join today and prosper!**

Visit us at [www.thermwood.com](http://www.thermwood.com).

# 91000 SuperControl Feature Evolution

To give you an idea of what you can expect from an upgrade, following is a list of features with each Software Version:

## Software Version 3.35

- CADPath feature added to generate smooth motion through fixed points in five-axis

## Software Version 3.39

- Partial NC reset warning added to help prevent operator reset error

## Software Version 3.45

- Spline capability enhanced for motions that contain rotary axes

## Software Version 3.70

- Auto-save for probe scanning added to eliminate the possibility of losing file through operator error

## Software Version 4.00

- Improved operator screen layout

## Software Version 4.03

- Graphic error display added to show the location of possible causes of error signal

## Software Version 4.15

- Service clock system added to keep track of machine use and advises lubrication and maintenance
- Added support for three-dimensional rotary helix and multiple rotary axis commands within helical arcs
- Enhanced erase protection for file transfer added
- Block Stop capability from Hand Held Programmer added
- Increased the maximum number of labels from 99 to 1000

## Software Version 4.25

- Axis 0 command added to make programming five axis plunge motions easy for right hand configured machines only
- Improved 3-point arc conversion for rotary axis helical arcs added
- Tool length compensation support for arcs, 3D arcs and helical arcs added
- Length compensation status display added
- Support for on-the-fly changes of length compensation added
- Active tool holder display added that tells the operator what tool

should be in the spindle

- Support for Hand Held Programmer pulse wheel with axis redirect command added allowing programming directly on the second table of a dual table machine

## Software Version 4.39

- Increased the maximum number of Advanced Function Language variables from 256 to 384
- Arc centers to be defined in absolute while programming

## Thermwood 99



- Tool Management System created to simplify the management of the spindle types, tool changers and tools
- 3-D Circle Macros that machine circles at any head angle with no programming
- Quick shutdown via "alt Q" performs a quick, safe system shutdown
- Pointer Misalignment Message to warn operator of misalignment
- World coordinate program value (G79) always references true machine home
- Part coordinate set (G51) redefines part zero relative to machine Home
- Fixture offset without motion (G52) redefines part zero relative to machine Home
- Fixture offset with motion (G53) redefines part zero relative to machine Home
- Tool Offset (G54) incrementally adjusts current G92, G51, G52 or G53
- Timer Subprograms measure program cycle times, display them on the screen and log them to file for future reference
- Linear axes feed speeds increased to 1200 IPM capabilities.
- Rotary axes speeds tripled, acceleration doubled

## Thermwood 2000



- Part Program Variable Color Display making specific codes stand out and easy to distinguish
- Allows "G00" Rapid Traverse

motions to be entered directly from the Hand Held Programmer

- Rapid Traverse By-Pass Code allows control over G00 motions with the Feed Rate Override knob
- Real Time Tool Life Monitoring
- A syntax can be placed into the part program to adjust the wear factor of a tool
- Automatic Tool Substitution for tool changing machines when the tool life has expired
- Tool Management System implemented on 5-axis machines
- Full Label Scan Capability
- Vertical Axis Clearance Motion Suppression

## Thermwood 2001



- Operates on the Windows 2000 Operating System
- Virtual Service
- More Robust file handling
- Additional Tool Measuring System Features
- User Definable Sub-Program Path Capability
- Selectable Background color for Part Program
- Color Display

## Software Version 5.05



- Fixture Offset Temporary Adjustment Ability
- AFL Current Programmed Feedrate Function allows programmed modal federates to remain after a tool change macro is executed.
- SuperControl users can communicate with other users directly from the control.
- Thermwood Web store access from the 91000 SuperControl.
- Ordering of machine parts via part numbers or manual description
- Radius Compensation Temporary Adjustment Ability
- Axis Oscillation Feature for extended cutter life
- Enhanced Pointer Misalignment Function
- Programmer/operator can get a snapshot of the current Feed-Rate Override value.

Visit us at [www.thermwood.com](http://www.thermwood.com).