91000/Gen2/QCore 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:

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 feedrates 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.

Gen2 SuperControl GEN2

- Windows "XP Pro" Operating system
- Windows Style Interface with drop down menus, eliminates function keys, is more user friendly
- AFL, Advanced Function Language, executes over 10 times faster
- Volumetric Compensation allows compensation throughout the entire envelope of the machine. Compensates for any errors due to axis interaction.
- Virtual Service can now be over the high speed internet resulting in a much faster speed.
- Tip Center Rotation allows you to pivot around the tool tip as one command in the teach mode. Can be used for positioning only or to create an arc motion.
- Constant Tip Speed is designed for segmented style programming to better control the feedrate at the tip of the tool.
- Fault Information, requires digital Siemens drives, displays fault information on control display and links directly to a help document for each fault.
- Machine Variables Dialog replaces the M999 macro which allows for faster more intuitive changing of machine specific variables and allows for user defined fields.
- Tooling Dialog provides a visual layout of the tool changers which shows all tools that are used in the currently loaded program in addition it will flag tools to be used in the program when they are not set up correctly to an actuator or changer.
- X & Y Axis Coordinate System Rotation allows for the entire program or portions of the program to be rotated.
- Fixture Placement Compensation allows a fixture to be moved or rotated and the program to be re-oriented to compensate for the fixture movement.
- Load/Unload Feature allows you to execute a partial tool change operation which makes for a more user friendly and faster bit changing maintenance routine.
- Flycut System automates the process of surfacing the table or waste board of the machine, to ensure flatness, improve vacuum flow, and to remove excess etching from previous cutting, and automatically updates necessary variables. The Flycut system REQUIRES and works in direct conjunction with the Tool Measuring System option.
- Software Unwind feature, G25, is used with continuous rotational axis. This feature allows the software to "unwind" multiple revolutions of the rotary axis via software versus multiple mechanical revolutions. This feature can be used in 5 axis machines as well as 3 axis machines using the rotary playback or "C" axis.
- Quick Cut compatible.

QCore SuperControl QCore

- Microsoft® Windows® 7 Professional operating system, offering the operator choices for program and machine operation display, pop-up windows for event and information display, pop-up windows for data input
- Quad Core processor 3.0 Ghz processor, full multi-tasking control
- The ability to operate the machine in the background while doing other tasks on the control.
- Equipped with a 17" full color LCD flat screen monitor, QWERTY keyboard, 1 TB SATA hard drive
- Configured to perform 5 axis simultaneous motions