



Vision® **T5c**

Your **Upgrade** to **Simplicity**

The Vision T5c has been designed specifically to retrofit onto existing cutting machines, and can quickly and easily replace most older Vision controls. With backwards compatible hardware mounting, and included electrical interface, updating your old Vision CNC to the latest touch-screen technology is quicker and easier than ever.

### Windows® 7 Based CNC

The Vision T5c is a powerful, yet easy-to-use, CNC designed specifically for shape cutting machines. Windows® 7 Embedded provides a stable Operating System to run the Control Software, provide network connectivity, support USB devices, and is easily integrated into your shop floor network.

### Simple Operation Through Advanced Touch Screen Interface

ESAB is the only manufacturer that offers a complete range of fully integrated CNC shape cutting machines. By integrating all process controls into the Vision T5c, operation is simplified and manual errors are reduced, unlocking all of the productivity potential from your machine. Virtually every step of the production process can be controlled and automated to ensure fast, accurate, and easy operation.

- Operator Wizard simplifies basic operation
- New Process Selector reduces setup time
- Context Sensitive Help System
- Remote Diagnostics for faster support
- Built-in Process Database
- Automatic Data Collection with included DataLeap Light Feature
- Bright, Wide-format, 18.5" Touch-Screen
- DXF / DWG import with lead-in/out handling
- Windows® 7 for networking and USB support
- Optional EasyNest Automatic True-Shape Nesting



### Features at a glance

- Hardware and electrical backwards compatibility with the Vision 4x series controls (Vision 1000, Vision 2000, Vision 2000C, Vision 3000, and Vision PC).
- Newly designed touch-screen interface allows operation even with gloved hands. The intuitive, color-coded interface is easy to learn and easy to operate.
- By focusing on ease of use, the Vision T5c simplifies control of all types of cutting machines and complex process tools.
- OpWizard simplifies operation by guiding the operator through machine start-up and basic steps to cut a part or nest.
- The new EasyShape library of standard shapes lets operators quickly generate optimized part programs for most common shapes.
- On-board process database eliminates the guesswork in setting up process parameters, so you get consistent cut quality every shift, every operator, every time!
- DataLeap Light software automatically captures operating data to allow evaluation and tracking of machine utilization, operator efficiency, and productivity.

# Vision<sup>®</sup> T5c

## The Ultimate Touch-Screen User Interface

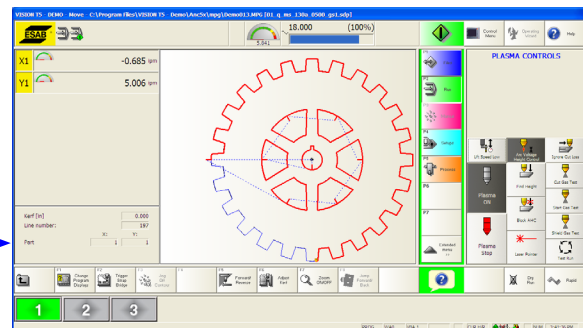
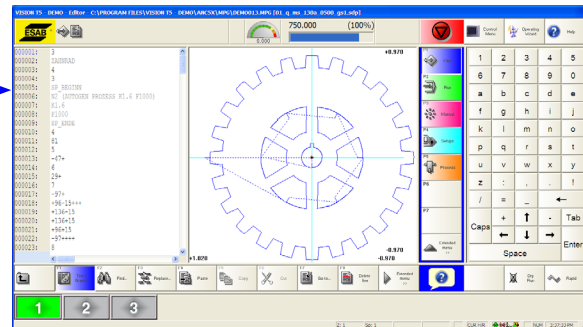
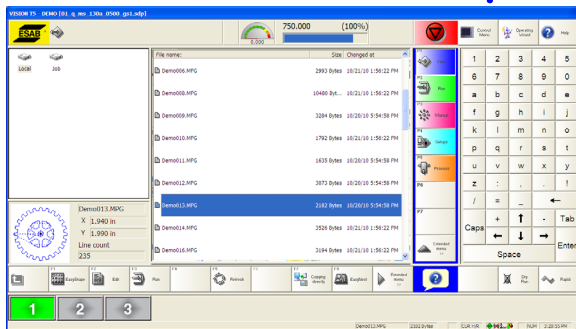
### Easy To Learn, Easy To Operate

Simplicity and ease of operation are the core principles guiding the development of the new Vision T5c touch-screen based control. The touchable, graphical user interface is designed to provide more information and feedback to the operator. Important information is always visible, and operating steps are clear and intuitive, guiding the operator every step of the way.

### Operating Wizard

From power-up to cut part, the new OpWizard guides users with clear, step-by-step instructions. New operators can be productive quickly by following simple prompts with limited choices that lead from file selection to starting the cut. This unique system starts at power-up, simplifying control start-up and machine referencing, and includes steps for torch setup and positioning the machine.

**i** The basic interface: navigate to a file in the explorer window then go directly to the part editor or to cut mode.



### Ergonomic Wide-Screen Layout

The Vision T5c features a large, bright, 18.5" wide-screen display, mounted in a wide-layout panel. The touch-screen interface and wide layout means less vertical arm motion, reducing stress and enhancing comfort. Controls are positioned for easy access while eliminating interference. Dual panel mounted USB ports allow easy access to multiple devices, but are positioned out of the way to prevent damage. Simple up/down toggle switches give intuitive operation of station lifters, and are easily serviced or added in the field.

**i** Menu colors show which window is active, since multi-tasking allows working two concurrent windows.

### EasyShape<sup>™</sup> Part Program Generator

The new EasyShape Part Program Generator is more than just a shape library. EasyShape includes an advanced shape library with 88 pre-designed variable shapes that can quickly be adapted by entering dimensions on the touch-screen keypad. EasyShape also includes a CAD import capability so operators can directly import CAD files, which are post-processed into optimized part programs, without any programming or manual intervention required. When cutting carbon steel using ESAB's m3 Plasma<sup>™</sup> system, ESAB's Precision Hole Technology is automatically applied to small holes and slots.



# Your Upgrade to Simplicity

## Maximum Integration for Highest Productivity

### Advanced Process Controls for Higher Productivity

With the Vision T5c, all cutting and marking process tools are controlled directly on the touch-screen. Operation is easier and faster when the controls you need are always at your fingertips.

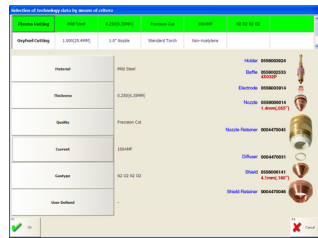
### Complete Process Integration

Only ESAB fully integrates all process controls for every cutting or marking tool, making operation quicker and easier for every machine. External control boxes are eliminated, and all processes are fully automated through the built-in process database, eliminating the need for manual settings and dramatically boosting productivity. This makes the Vision T5c the ideal CNC system for controlling complex cutting tools and processes, such as bevelling, inkjet marking, laser cutting, grinding, milling, and drilling.

### Built-In Process Database

The Built-In Process Database simplifies cutting tool setup by automatically setting parameters such as cutting speed, kerf offset, and timers based on material thickness, material type and cut quality desired. The operator sees a picture and part number for the torch parts that are needed, for both plasma and oxy-fuel torches.

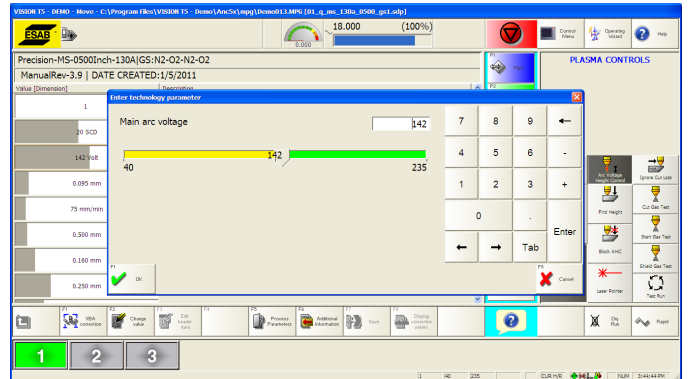
The improved Process Selector for the Process Database. Select material type, thickness, and quality - the Vision T5c shows you which parts to put in the torch.



All parameters are automated for every process tool, including oxy-fuel, laser, marking, and beveling.



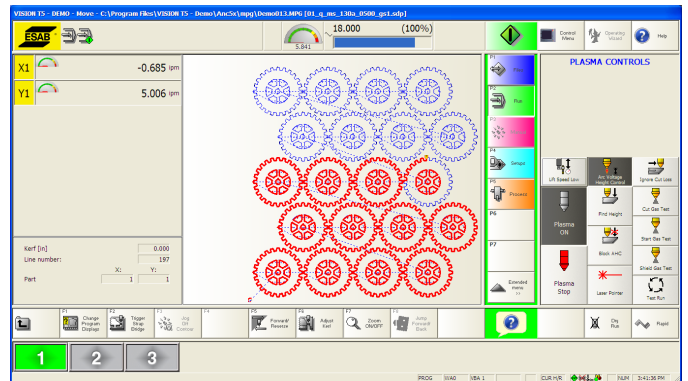
Manual process controls such as Plasma Start or Height Control Allow are all provided on-screen for easy access.



Process Setup can be fully automated or completely manual, and there are many ways to enter the data - touch and hold to increase or decrease a setting, touch and move a slider, or type in the data directly.



Complete process tool integration means better feedback in the form of pressures, flows, and actual values from the plasma and oxy-fuel control.



Tool stations are selected by on-screen buttons. The Vision T5c knows what type of station is selected and automatically shows the controls for that process.



# Hardware and Software to Drive Efficiency

## Software Features

- True multi-tasking for increased productivity
- Operating Wizard guides operator from machine startup through cutting a program.
- Built-in process database for plasma, oxy-fuel and marking processes allows quick and easy setups
- On-Screen Controls for 1 to 12 stations
- On screen displays of actual machine speed, axis speed, position, total time, remaining time, and process time.
- 4 tool path controlled axes (X1, X2, Y1, Y2)
- 28 positioning axes for various beveling tools
- Automatic Referencing simplifies machine start-up sequence
- Plate alignment to skewed plate
- Program parking for handling of rush jobs
- True geometric kerf with kerf override
- Automatic gantry squaring
- Easily scale, mirror, and rotate programs
- Multiple Working Areas with Software Limits
- Easily jump forward or backward through a program or return to program start
- Unlimited Backup-On-Path
- Power fail recovery
- Color Coded Graphical Menu Driven Operation
- Graphical Part Preview in Explorer Window
- Graphical program editor
- Joystick contouring for easy pickup of lost cuts
- Jog off contour with return or relocate
- Up to 6 definable working areas
- Real-time graphics with zoom
- Character generator for easier text marking
- Context sensitive on-line help
- Help on error messages
- DataLeap basic monitoring & reporting
- Remote diagnostics for troubleshooting or training
- Optional EasyNest Automatic True-Shape Nesting

## CNC + Programming

- Customizable EIA or ESSI programming
- Color coded menu and dialog-driven operation
- Real-time graphical program displays
- Integrated software PLC for process control

## Operator Panel

- PC based controller running Windows® 7 embedded
- Touch Screen (5-wire resistive touch)
- 18.5" color LCD with 16:9 wide-screen format
- 1366 x 768 pixels resolution
- 8 position joystick
- Speed control potentiometer
- Integrated emergency-stop pushbutton
- Intel DualCore Processor
- 1 GByte RAM, expandable to 4 GByte
- 250 Gbyte Mobile SATA Hard disk
- Standard toggle switches for station up/down are easily serviced or added in the field
- Panel prepared for up to 12 stations
- Industrial Protection rating IP54
- Optional heater/cooler
- Optional remote hand pendant
- Panel mounting holes compatible with Vision 4x series controls (Vision 500, 1000, 2000, 2000HD, 2000C, 3000, and PC)

## Machine Control Capability

- Integrated software PLC
- Uses industry standard IEC-1131 programming
- Cycle time up to 250 µs
- Executes 1k PLC instructions < 10µs
- 8 fast inputs / 8 fast outputs
- 8 path controlled axes
- 28 additional axes via CAN-Bus
- 3D- applications
- Plug-compatible interface to Vision 4x series controls

## Communication

- Dual USB 2.0 ports accessible on front panel
- Integrated Ethernet Port (LAN / WAN)
- RS-232/422
- CAN-Bus I/O Controller
- OPC Interface
- Interface to older ASI/OB and ABIMBO I/O systems

Specifications are subject to change without notice. Please contact ESAB Cutting Systems for the most current specifications.

**ESAB Cutting Systems / [esab-cutting.com](http://esab-cutting.com) / 1.888.372-2288**

**USA:** P.O. Box 100545, 411 South Ebenezer Road, Florence, SC 29501-0545

**Canada:** 6010 Tomken Road, Mississauga, Ontario L5T-1X9

**Mexico:** Ave. Diego Díaz de Berlanga No. 130, Col. Nogalar San Nicolás de Los Garza N.L. CP 66480 Monterrey, Mexico

**FIND US**  [facebook.com/esabna](https://facebook.com/esabna)  [twitter.com/esabna](https://twitter.com/esabna)  [youtube.com/esabweb](https://youtube.com/esabweb)

