EDGE® Connect

Shape cutting control



Easy, reliable, customizable performance

EDGE Connect

EDGE Connect is the next generation of Hypertherm's industry leading automated control systems. This new platform is built upon almost 50 years of experience and commitment to develop, build, and sell products that improve your cutting operation.

EDGE Connect uniquely combines Hypertherm's embedded expertise with OEM customization. Cutting-machine OEMs can create greater differentiation leveraging Hypertherm's embedded cutting expertise foundation.

EDGE Connect offers many new software features, enhanced hardware, and field based system configuration capabilities.



New with EDGE® Connect CNC

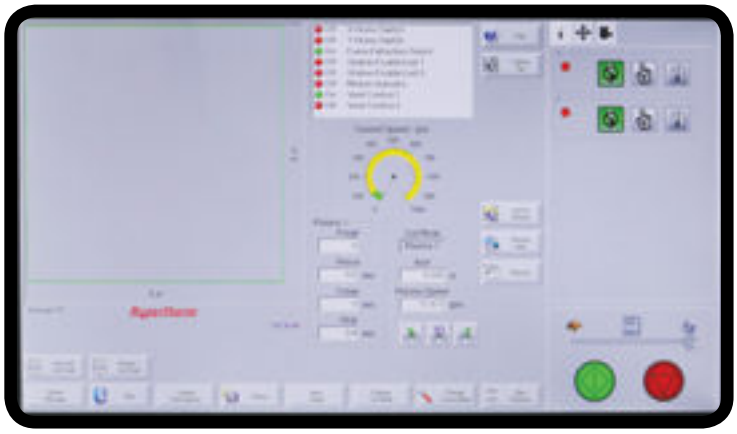
- Hypertherm's Phoenix® version 10 CNC software
- Microsoft Windows 10 embedded operating system
- ProNest® CNC automatic nesting with process optimization
- Internal software Programmable Logic Controller (PLC) and software-based operator's console that enable unique cutting machine features
- EtherCAT machine interface for easy connectivity and superior motion
- Integrated 482 mm (19") projected capacitive touchscreen available on some models

Easy to use

Hypertherm's proprietary Phoenix software is common across the entire family of CNCs. This software is designed specifically for the X-Y and bevel cutting market. Through years of cutting experience, Hypertherm® engineers have learned the critical parameters to achieve superior cut quality on every part.

Phoenix CNC software improves cut quality and productivity by delivering our expertise directly to your factory, making it as if you have your best operator on every shift.

- Using the patented CutPro® Wizard, even new operators can be ready to cut production parts in less than five minutes
- On-screen Software Operator's Console (Soft OpCon) for easy setup and operation of cutting station and manual motion



Phoenix 10 with Soft Operator's Console

- One touch access to supporting documentation including cutting optimization tips, consumable change instructions and diagnostic tools in multiple languages
- Integrated communications with plasma and torch height control systems deliver automated and expert control using installed factory or custom cut charts
- Custom cut charts can be created and controlled in the part program or made available to the CutPro Wizard
- Configurable Watch Windows™ enable on-screen real-time monitoring of key process performance parameters while cutting

ProNest CNC nesting

ProNest® CNC software enables users to obtain optimal cut quality for nested part programs created using EDGE® Connect.

- Through the touch screen interface, machine operators can conveniently create nested part programs without extensive training.
- Empowers the machine operator for higher productivity and is an excellent companion package to offline ProNest software.
- Directly import DXF, DWG and CNC simple shapes.
- Embedded SureCut™ technology to maximize performance through embedded expertise.

SureCut™

- Patented True Hole® technology with process verification ensures all operator variables are properly set.
- Pattern Array Nesting for a single part with process optimization included.
- Optional True Shape Nesting module for multiple parts available for purchase.

Reliable

The EDGE Connect line of CNCs significantly enhances overall system reliability.

- High-speed digital EtherCAT machine interface and communications with single wire connectivity
- Low power, fan-less quad core processor PC requires no active cooling
- Solid state hard drive with no moving parts for increased data access speed and reliability
- Projected Capacitive (PCAP) touch technology offers pristine optical clarity, high-touch durability, resistance to water, and long-term stability over temperature in industrial applications
- Designed and stress tested to ensure reliable and consistent operation in harsh cutting environments
- 2-year factory warranty



Serviceability

- Remote Help™ quickly enables CNC, plasma system and cutting machine diagnosis and repair over the internet reducing the need for on-site visits.
- Hypertherm® plasma, CNC, and THC manuals are available in multiple languages at the touch of a button.
- Worldwide network of Hypertherm service engineers available as needed to support cutting machine manufacturer service personnel.

Customizable performance

- Hardware and software designed for a broad range of processes such as plasma (including cutting, marking, bevel, pipe/tube), oxyfuel (including bevel), and waterjet applications.

Flexible configurations

EDGE Connect is available in three hardware configurations to best align with cutting machine manufacturer needs. Each configuration provides the power, performance and features of Phoenix® CNC control software. The EtherCAT digital machine interface provides smooth optimized motion for up to 12 axes.

EDGE Connect



The smallest of the CNC configurations, the EDGE Connect offers the greatest flexibility for machine integration. Cutting machine OEMs provide the touch screen and any operator switches.

EDGE Connect T



Integrates the EDGE Connect CNC into an industrial enclosure with a 482 mm (19" display) touchscreen.

EDGE Connect TC



Builds on the EDGE Connect T with the addition of a hardware operator's console with switches for start, stop, program and manual speed control, raise/lower torch and joystick.

Point-of-use configuration

EDGE® Connect CNCs are configured in the field with software specific to the cutting machine application. This allows for easy set up, changes, and upgrades.

- Basic and advanced process control for plasma, oxyfuel, and waterjet
- Integrated Sensor™ THC and bevel
- ProNest® CNC True Shape Nesting
- PLC Connect™
- Optional Sensor plasma torch height control mechanics (Sensor THC)

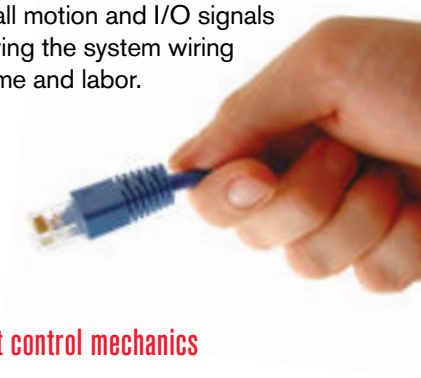
OEM customization

- PLC Connect is embedded in the CNC for additional capabilities tied to I/O signals, position, cutting state, and error conditions. IEC61131 compliant
- OEM customization of the on-screen software operator's console for control of unique system tools and features though use of a C-Sharp (C#) Application Program Interface (API)
- Machine-specific user manuals can be added for easy access to critical information

Ease of installation

EtherCAT

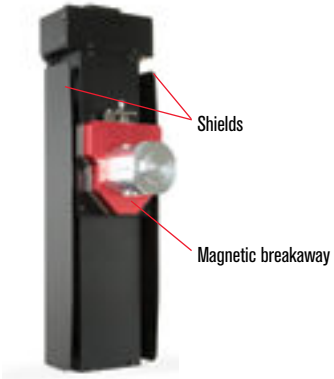
- Utilizing EtherCAT connectivity, the EDGE Connect requires only a single EtherCAT cable for all motion and I/O signals from the CNC, drastically simplifying the system wiring and reducing costly installation time and labor.
- Communication to Hypertherm's HyPerformance® Plasma systems is accomplished through EtherCAT connectivity directly to the cutting system.



Optional Sensor plasma torch height control mechanics

Hypertherm provides lifter mechanics and an optional magnetic breakaway to pair with the Sensor THC software on Hypertherm CNCs. This lifter mechanism, based on the proven ArcGlide® design, provides exceptional performance in the harsh plasma cutting environment. The slide pairs with both digital and analog drives and motors, which are supplied by the cutting machine manufacturer and connect to one of two motor coupling options.

- Robust mechanics for the harsh cutting environment
- Ability to be used on plasma systems up to 800 amps
- Side shields protect the slide from debris for multi-torch systems
- Magnetic breakaway protects the torch from damage during collisions, and allows for quick, repeatable recovery should a collision occur
- The integrated laser point allows for easy plate alignment



Sensor Torch Height Control is an integrated torch positioning system to provide optimized plasma cut performance using Hypertherm's embedded process expertise.

Visit www.hypertherm.com/EDGEConnect

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One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers' success. We are always striving to become better environmental stewards; it is a process we care deeply about.

Greener Cuts

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897040

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