

FLASHCUT CNC

CONTROL MADE SIMPLE

CAD/CAM/CNC Software and Controls

Titanium Series CNC Control Console



**Industrial All-In-One Servo or Microstepping
Motion Controller and CNC Control Panel**

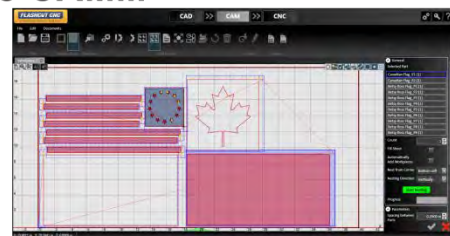


- All-in-one ergonomic industrial CNC console with sealed steel construction.
- 8A advanced microstepping or 25A peak digital PID servo for up to 5 axes of motion control.
- Pedestal mounting with bottom access to all connections reducing exposed cabling on machine.
- Hinged top access for easy maintenance.
- Integrated E-Stop and Reset buttons and optional external control switches for over 10 functions including Cycle Start, Feed Hold, Jogging Joy Stick, File Load, Output Line Control.
- Integrated Stingray® plasma torch height control follows the sheet surface at the precise height
- Real time visualization of toolpath and torch voltage settings.
- Completely integrated FlashCut CAD/CAM/CNC enables you to easily draw a 2D part, create the toolpath with lead-ins and outs, nest and cut.
- DXF import, image import and shape library with a multitude of shapes.
- Integrated cut charts for plasma, oxy and waterjet.
- Automatic kerf crossing detection in THC algorithm prevents diving.
- Optional Laser pointer support for precisely setting program zero, sheet alignment and visually testing toolpath.
- Optional software feature upgrades include: direct communications with Hypertherm® and bar code scanning for easy data input on a shop floor.
- Made in the USA.

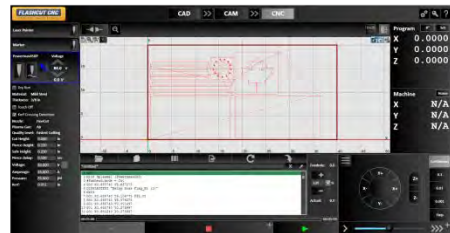
From CAD...



To CAM...



To CNC Control...



	Titanium Servo	Titanium Microstepping
Amperage	12.5A Continuous, 25A Peak	8A with Idle Current Reduction
Technology	Digital PID	Anti-Resonance, Inertia Matching
Voltage Bus	80VDC	70VDC
Input Voltage	Single Phase 120VAC or 240VAC	
Output Lines	(8) 5V TTL or (32) 5V TTL and (2) 0-10V Analog with Optional Expansion Board	
Input Lines	(8) Optically Isolated 5 – 24V or (32) Optically Isolated 5-24V and (1) 0-10V Analog with Optional Expansion Board	
Com Ports	(2) USB, (1) Optional RS485, (1) Ethernet, (1) WiFi	
Computer Specs	5 th generation Intel I3 Microprocessor w/ 8GB RAM, 120GB SSD, Win 10 Pro	
Input Devices	Industrial 19.5" Capacitive Touch Screen, NEMA 4 waterproof keyboard/mouse	



Introducing Full Support for Hypertherm® HPR® and Kjellberg® SmartFocus® Plasma

Now you can use FlashCut's intuitive, powerful and integrated CAD/CAM/CNC interface to control hi-definition plasma's from Hypertherm and Kjellberg. This includes full auto-gas control for the Hypertherm HPR along with the Kjellberg SmartFocus and Hi Focus units. The new interface has been engineered to give you seamless access to all of their auto-gas controls, commands and messages, so you can cut precision parts with high definition plasma quickly and easily.

- Full support of Hypertherm HPR systems, including auto-gas control
- Full support of Kjellberg Smart Focus and HiFocus plasma systems including auto-gas control
- RS-422 connection provides seamless communication between the FlashCut interface and plasma system
- Auto-gas control for mixing the plasma and shield gases for HPR, Smart Focus and HiFocus Plasmas
- GUI control of amperage and pressure
- Separate amperage settings for ramping and full speed cutting
- Seamlessly change from marking to cutting settings on the fly
- Integrated cut charts for HPR, Smart Focus and HiFocus families
- Precision height control using FlashCut's Stingray® THC
- Ohmic disconnect circuitry protects system from noise and voltage spikes
- Compatible with FlashCut Pro-Series and Titanium Controllers
- Real-time diagnostics shows torch status and history of error messages and important parameters.



The screenshot shows the 'HPR Data Viewer' panel with the following sections:

- Power Supply Status:** Line Voltage, Current Setpoint, Chopper-A, WorkLead, Coolant Flow, Corner Current, PS State Code, Last Error Code.
- Temperatures:** Chopper-A Temp, Coolant, Transformer.
- Gas Types:** Plasma Inlet Gas, Shield Inlet Gas.
- Gas Pressures:** Plasma Outflow, Plasma Prewflow, Shield Outflow, Shield Prewflow, Inlet Cut Gas 1, Inlet Cut Gas 2, Mixed Gas 1, Mixed Gas 2.
- Firmware Revisions:** Power Supply Revision, Gas Supply Revision.
- Gas System Tests (1 minute):** Inlet Leak Test, System Leak Test, System Flow Test.
- Test Flow:** Prewflow Gas Test, Outflow Gas Test, Manual Pump Control.

Buttons for 'Reset System', 'Clear Warnings', 'Power', and 'Connect' are located at the bottom.

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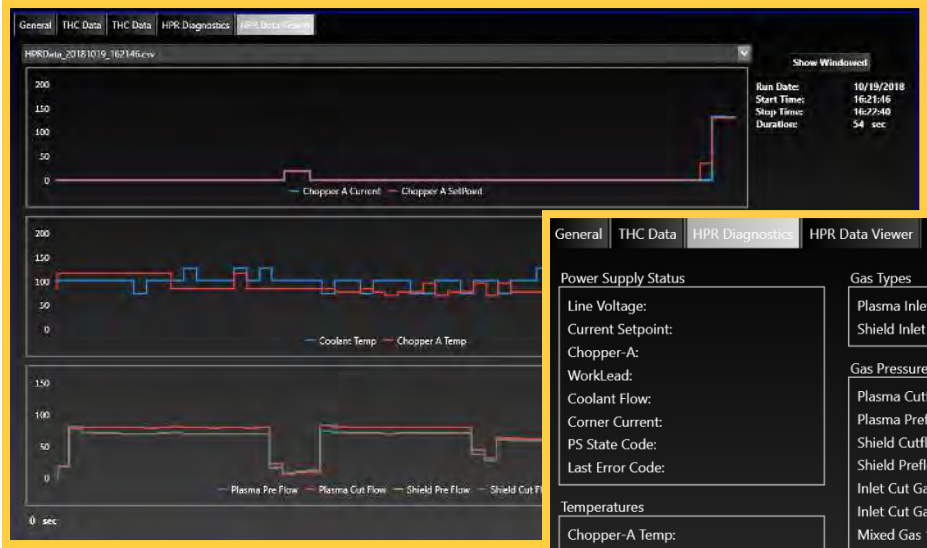
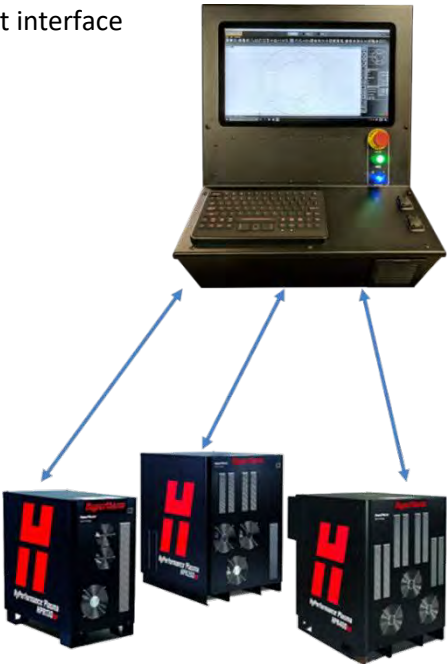
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Introducing Full Support for Hypertherm® HPR® Plasma

Now you can use FlashCut's intuitive, powerful and integrated CAD/CAM/CNC interface to control Hypertherm HPR plasma systems. The new interface has been engineered to give you seamless access to all of the HPR controls, commands and messages, so you can cut precision parts with high definition plasma quickly and easily. Our new Smart360 HCT has been engineered to cut the highest precision holes for any given gas mixture.

- ✔ Supports HPR® 130, 260, 400, 800 Plasma Systems
- ✔ RS-422 connection provides seamless communication between the FlashCut interface and HPR® system
- ✔ Auto-gas control for mixing the plasma and shield gases
- ✔ GUI control of amperage and pressure
- ✔ Separate amperage settings for ramping and full speed cutting
- ✔ Seamlessly change from marking to cutting settings on the fly
- ✔ Integrated cut charts for HPR® and HSD™ families
- ✔ Precision height control using FlashCut's Stingray® THC
- ✔ Ohmic disconnect circuitry protects system from noise and voltage spikes
- ✔ Compatible with FlashCut Pro-Series and Titanium Controllers
- ✔ Real-time diagnostics shows torch status and history of error messages and important parameters



Power Supply Status	Gas Types	Gas System Tests (1 minute)	
Line Voltage:	Plasma Inlet Gas:	Inlet Leak Test	
Current Setpoint:	Shield Inlet Gas:	System Leak Test	
Chopper-A:	Gas Pressures	System Flow Test	
WorkLead:	Plasma Cutofflow:	Test Flow	
Coolant Flow:	Plasma Preflow:		Preflow Gas Test
Corner Current:	Shield Cutofflow:		Cutofflow Gas Test
PS State Code:	Shield Preflow:		Manual Pump Control
Last Error Code:	Inlet Cut Gas 1:		
Temperatures	Inlet Cut Gas 2:		
Chopper-A Temp:	Mixed Gas 1:		
Coolant:	Mixed Gas 2:		
Transformer:	Firmware Revisions		
Reset System	Power Supply Revision:		
Clear Warnings	Gas Supply Revision:		
Power			
Connect			

Hypertherm®, HPR® and HSD™ are trademarks or registered trademarks of Hypertherm Corporation



Smart360™ Hole Cutting Technology for Air and Hi-Def Plasma

FlashCut's exclusive Smart360™ Hole Cutting Technology produces excellent quality holes and cutouts:

- ✔ Works with all plasma systems cutting mild steel including air plasmas and high definition plasmas
- ✔ Auto-recognition of small holes utilizes lower feedrates and temporarily turns off THC to prevent diving
- ✔ Auto-calculation of kerf vs. federate creates high accuracy holes
- ✔ Early torch turn-off prevents extraneous marks at the end of hole
- ✔ Line-arc lead-in reduces mark at beginning of hole and ensures a uniform feedrate along the entire cutout
- ✔ Can be used to increase the accuracy of small cutouts in addition to round holes

