Phoenix™ Software Demonstration

Application Note

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Phoenix Software Ease of Use Demo

This demonstration (demo) software showcases the HPR260XD[®] Auto Gas plasma supply with Phoenix, the motion-control software on Hypertherm CNCs.

System requirements

- Microsoft[®] Windows[®] XP SP3 or higher
- 2 GHz processor or higher
- 1GB memory or higher
- 1,024 x 768 display resolution

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Phoenix Version 9.75.0 or higher demo software can run on both 32-bit and 64-bit Windows operating systems.
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Before you begin

- For best performance, close all other applications when running the demo.
- Depending on your Windows display settings, the Phoenix software may have a different appearance than it does on the CNC. If you are running Phoenix Demo on Windows 7, set Display to Smaller – 100% (default) for best results.

Phoenix is designed for use with a touchscreen so you will need to use your mouse to navigate the software. You can also use these keyboard shortcuts:

Function	Keyboard shortcut			
Assigned soft keys	F1 – F8			
Start	F9			
Stop	F10			
Manual mode	F11			
Help	F12			
Previous	Home			
Next	End			
Cancel	Esc			
Exit demo	Alt + F4			

Start the demo

- 1. Double-click the Hypertherm desktop icon or choose Start > All Programs > Hypertherm Phoenix > Phoenix 9 Demo HPRXD Plasma.
- 2. Click OK to exit the copyright notification, documentation update, and torch height control messages. After a few moments, the CutPro[®] Wizard launches.
- 3. Choose Begin.

CutPro Wizard demo

The CutPro Wizard automates the most common tasks on the CNC.

- Load a part. The CutPro Wizard displays the Plasma 1 process for the HPR260XD.
- Change the Process Current from 260 A to 80 A. Click Next to proceed from step to step.
- Load consumables. The CutPro Wizard displays the consumable part numbers for Hypertherm systems. After you select the 80 A process, the HPRXD 80 A consumables appear in the CutPro Wizard.
- Align a plate. Move the tool to the start point on the plate or select the location of a skewed plate using a step-by-step process.
- Enter an amount for scrap clearance.
- Review the settings.
- Select Cut Mode.
- Start cutting.

When the part finishes trialing or cutting, click Yes to return the torch to the start point. The CutPro Wizard restarts after 10 seconds.

Alternate demos

Load the ProNest[®] Demo Part or True Hole[®] Demo Part from the Demo Parts folder to see the advantages of the part program support from Hypertherm CAM Solutions.

- When you load the ProNest Demo part into the CutPro Wizard, it automatically displays the plate size and selects the HPRXD 130 A process.
- Additional information is embedded into the part program by ProNest, including multiple kerf settings, speed, and height control values to allow dynamic adjustments to the process while cutting. You can view the codes that ProNest embeds in the part program by choosing Shape Manager > Shape Wizard from the Main screen.



The True Hole part program shows notifications that prompt you to verify the process settings. This feature confirms that the settings on the CNC and cutting machine are correct and ensure the cut quality results of the True Hole process. Phoenix prompts you to correct or ignore the specific parameter. For the purpose of the demo, choose Ignore in response to these messages.



Additionally, you can load a customer EIA or ESSI part file by placing it in the root of a USB memory stick. Change the folder location to memory stick and then select the part you want to load.

Loading existing customer part files may require adjustment to I/O or other parameters to allow simulated motion.

Load and Save Setup files

The Phoenix Demo allows you to load and save unique setup files to USB memory stick. You can view parameters in existing machine setup file or customize the demo setup file to show specific functions.

Loading a custom setup file may require adjustments to I/O or other parameters to allow simulated motion.

Before loading a custom setup file, save the setup file that was provided with the demo under a new name.

- **1.** Insert a USB memory stick.
- 2. On the Main screen, click Setups.
- 3. Click Password and enter the Special Setups password.
- 4. On the Special Setups screen click Load Setups.
- 5. Select Memory Stick on the dialog box and click the desired file to load.

EDGE Pro	
Load setups from	()
Memory Stick	•
Setup files	
Name	Size
DemoSetups	335281
Setups file name	
Setups	
🖌 ок 😣	Cancel

6. To save a setup file, click Save Setups on the Special Setups screen.

You can use the following view-only passwords for password-protected screens to see the screens but not make changes to the parameters.

- Machine Setups 2865
- Special Setups 5682
- Station Configuration 4532

Additional features

Please take a few minutes to review these unique features of the software.

Help



Click the Help soft key on any screen to open to the relevant page of the manual.

On the Help screen, click the HPR Manual soft key. Select 260XD for HPR and Auto for Gas Control to display the plasma supply manual.



You can locate additional Hypertherm product manuals by visiting www.hypertherm.com and choosing the Downloads Library link.

Watch Windows



Press the right and left arrow keys at the lower right corner of the Main screen to quickly scroll through important operational information such as Cut Estimate Timer, Pierce Counter, HPR Diagnostics, consumable-life tracking, and System Errors. These screens can also be modified to suit table configurations and customer needs.

Plasma Cutting Tips



Plasma cut quality information and troubleshooting are accessible on the Main screen so that you can quickly correct issues.

Remote Help



Remote Help allows you to connect the CNC to technical support staff over the Internet. Technicians can have remote access to critical information on CNC parameters and diagnostic tools to provide immediate response. Remote Help uses built-in Microsoft Lync[®] software. The first time you access remote help, Phoenix will launch a web browser and open the Lync web application.

Shape Library and Nesting



Open the Shape Manager screen to view and load simple shapes, and access text editors, manual nesting, and more.

Loading files



Choose Files on the Main screen to highlight the features for loading parts from a USB memory stick, hard drive, network drives and serial communication to a host PC. In addition, you can save diagnostic log and system files for technicians with the Save function.

Cut charts



Open the cut chart screens to view the available parameters that you can customize to create unique cut charts.

Diagnostics

S	Diagnostics
-	

From the Main screen, choose Setups > Diagnostics. Note the soft keys available for checking Control Information, I/O, Drives and Motors, Front Panel, Machine, and HPR Auto Gas. Note that the I/O, Drives and Motors, and Machine Interface screens require that you enter the 7285 (view-only) password.

Ease of use with ArcGlide[®] or Sensor[™] Torch Height Controls

The Sensor THC is enabled as a torch height control in the setup file provided with the demo. ArcGlide uses the same process screen. Note how the height control can be set up for operation based on the first three selections for THC mode, and use factory settings for the remaining parameters. You can customize settings for unique cutting applications and save them for future as you can with the custom cut charts.

Sensor THC - Plasma 1	Check to Automatically set Parameter	C 04 C 0-	() Help
1/4" - Mild Steel - O2 / Air	Preliow During IHS M		
THC Mode	Offset IHS 🔽	© Off C On	Cutting
Height Control C Manual C Automat	IHS Start Height 🗷	0.75 in	Tips
IHS In Manual 🤨 Off 🛛 🧟 On	Skip IHS Within 🗵	1 in	
Sample Voltage C Off C On	Transfer Height 🔽	300 % Cut	
Cut Chart Values	Puddle Jump Height 🔽	150 % Cut	
Set Arc Voltage 150 volts	Creep Time 🔽	0 sec	
Set Arc Current 260 amps	Cut Height Delay 🖂	1.08 sec	
Cut Height 0.11 in	AVC Delay I	0.5 sec	
Pierce Height 0.33 in	Cut Off Time 🔽	0 sec	
Pierce Time 0.3 sec	Arc Off Time 🔽	0.3 sec	
Cut Speed 50 ipm	Stop Time 🖂	0 sec	
Options	Retract Height 🖂	2 in	
Nozzle Contact IHS O Off O On	Kerf Reacquire Time 🔽	0.5 sec	
Nozzle Contact Cutting			
Auto Kerf Detect Off On			Consel
Auto Kerf Detect Voltage 10 volts			
Corner Current Percent 100 %	Defa Para	ault All imeters	📀 ок
Plasma 1 Cut Chart Data	Load Data		Test Lifter
Plasma 1	Marker 1		Timing Diagram

For detailed information on the use and features of Phoenix software, please refer to the Help available in this demo and on the Hypertherm website.