

Significantly Reduce Consumable Wear During Pilot Arcing



Breakthrough nozzle design features patent-pending NickelPlus technology

Rapid Consumable Wear from Elevated Pilot Arc Time

Customers whose applications require continuous or excessive piloting face rapid consumable wear, frequent changeouts, and rising operating costs. Increased pilot-arc time accelerates nozzle bore erosion, leading to inconsistent cut quality, increased downtime, and reduced throughput — especially in automated or high-productivity environments..

Breakthrough NickelPlus Technology

The HyPilot cartridge with patent-pending NickelPlus technology extends nozzle life up to six times that of standard copper parts in high-pilot applications while maintaining cut quality and productivity. The result is fewer consumable changeouts, lower cost per cut, and more consistent output in automated, robotic, and high-use hand cutting applications.

HyPilot Benefits

Longer life

HyPilot cartridge resists pilot arc wear, delivering up to 6× longer life than standard copper parts in high pilot applications

Fewer mistakes

Single-piece HyPilot cartridge, SmartSYNC torch, and Powermax SYNC® enable auto setup to reduce errors and simplify operation

More profit

Fewer changeouts and higher productivity in Continuous Pilot Arc mode increase production time and reduce downtime

The Hypertherm HyPilot cartridge extends nozzle life up to six times that of standard copper parts, while maintaining cut quality and productivity

Applications Benefiting from HyPilot

3D heavy robotic and high-use cobot cast trimming

Automated and stand-off cutting of expanded metal/grating

Heavy-use hand (stand-off) cutting with moderate/excessive piloting

Key Features:

- 105 A mechanized cartridge engineered for demanding, high-pilot applications
- Silver-nickel nozzle bore designed to slow pilot-arc wear and extend durability
- Color-coded cartridge for fast, unmistakable visual identification
- Compatible with SmartSYNC® and Duramax® torches using the cartridge adapter
- 50-piece bulk pack option to streamline inventory and reduce handling

Powermax SYNC and cartridge accessories

Cartridge reader	Cartridge adapter
528083	428951
	
The cartridge reader scans cartridge data into your smartphone via the cartridge reader app. Download from popular app stores.	The cartridge adapter works with Duramax® torches to enable the upgrade to the Powermax cartridge on older Powermax systems.



HyPilot Cartridge Options

Amps	Mechanized/standoff cutting	Bulk kit (50)	Ohmic ring kit
105	528157	528158	428895*

*Kit includes three 420580 ohmic ring clips.

HyPilot Cartridge Life Versus Standard Copper Parts



Results of average consumable life at 25% pilot time determined in Hypertherm® labs.

Hypertherm Plasma: Trusted More than Any Other Brand

Manufacturers worldwide trust Hypertherm plasma more than any other brand. From handheld to automated, our proven plasma cutting solutions are rated as the industry's most reliable. Contact your Hypertherm sales partner to discuss how a Hypertherm plasma-cutting platform can modernize your operations.

Learn more about the HyPilot cartridge



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