

The SilverPlus™ Advantage

Who may benefit most from SilverPlus technology and how to achieve optimal plasma performance

SilverPlus customer profile

Hypertherm's SilverPlus technology will provide the greatest benefit to high duty cycle users who demand productivity from their HT2000 and MAX200 systems. The optimal profile for a SilverPlus customer is one who:

- Runs several plasma arc cutting systems
- Operates multiple shifts
- Continuously cuts with the 200-amp oxygen process
- Maintains their plasma equipment in top running order
- Follows operating procedures set forth in Hypertherm's operating manual
- Tracks consumable life
- Ensures operators receive regular system training

Typical applications are steel service centers, heavy to mid-level fabricators, ship builders, and larger job shops.

All-copper electrode customer profile

In some applications, the end-user may not receive the full benefit of SilverPlus technology. These customers may be better off continuing with the standard all-copper electrodes. These customers:

- Frequently change processes, amperages, and or material types
- Operate at a lower duty cycle
- Have a set protocol for changing out consumables, i.e. after a fixed number of starts or after each shift
- Do not track consumable life or do not follow a regular system maintenance regimen

Smaller fabricators, job shops, and service centers may fall into this category.

SilverPlus process optimization

To ensure that the end-user gets the most from SilverPlus technology, there are a few important operating tips to consider:

Electrode wear: The unique characteristics of the silver/hafnium interface in SilverPlus permits the hafnium to wear to approximately double the depth of a standard all-copper electrode. This increase in pit-depth results in a similar increase in arc voltage while cutting. So, if an end-user

typically changes consumables after a 5-volt change in arc voltage, they may now be able to keep cutting until they see a 10-volt change.

Oxygen vs. air plasma: The SilverPlus electrodes significantly improve consumable life for 200-amp oxygen cutting. Although these electrodes can be used with the 200-amp air process, they are not likely to see the same relative advantage.

Process parameters: The same parameters that negatively effect the life of an all-copper electrode will also reduce SilverPlus electrode life, so it is important to consider a few basics:

- The cutting machine, plasma cutting equipment, and torch height control must be properly maintained
- Cutting errors such as ramp down, misfires, running off the plate should be minimized
- Pierce and torch height settings must be accurate
- Gas flows and pressures must be correct and the system free of leaks and restrictions

Technical support

For most applications, Hypertherm believes SilverPlus will significantly improve consumable life over our all-copper electrodes. In the event the customer does not achieve improved results, please contact an authorized Hypertherm service representative.



SilverPlus is an innovative, robust technology that will significantly reduce operating costs for many end-users. This guide outlines end-user criteria and provides operating tips to achieve the SilverPlus Advantage.

Genuine Hypertherm Consumables

The only way to ensure maximum performance

Hypertherm
The world leader in plasma cutting technology™

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