

# 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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