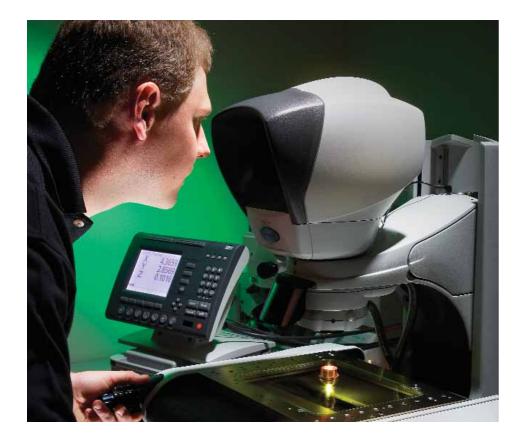
# **Hypertherm consumables** The only way to ensure optimal performance



## **Ensuring optimal performance**

Using genuine Hypertherm consumables for your Hypertherm plasma cutting system is the only way to ensure optimal performance. Our consumables have the latest performance-enhancing technologies and are machined to the highest quality standards. Hypertherm stands behind our products with industry-leading service and training.





#### **Highest quality standards**

Our proprietary HyQ Six-sigma manufacturing processes deliver high-tolerance parts for consistent performance cut after cut. We employ Lean manufacturing principles and are ISO 9001:2000 certified, making our manufacturing excellence second to none.



#### Latest technology

For over 40 years, Hypertherm has proven that innovation cuts the cost of cutting metal. Our focus is to develop new technologies that improve cut speeds, edge quality and consumable parts life for Hypertherm systems old and new.



## Industry-leading service and training

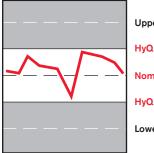
Through our HySupport<sup>™</sup> service infrastructure, your Hypertherm supplier is backed by deeply committed professionals who are the experts in the plasma cutting industry. Whether it's customer service, training, parts or technical service, Hypertherm and our partners share a genuine interest in your success.

## The importance of quality

Short consumable life leads to reduced productivity and higher consumable costs. There are certain features in consumables where a ten-thousandth of an inch (.0025 mm) can make a dramatic difference in quality and performance. We know the dimensions that matter and manufacture them to our HyQ Six-sigma standards part after part.



#### HyQ critical to function dimensions





Nominal dimension

HyQ lower control limit

Lower specification

HyQ limits are kept at 50% of the engineering tolerance.

These dimensions are focused on early in the development process to make sure we are able to manufacture parts that are consistently held within a range 50% narrower than the engineering tolerances. This is what our proprietary HyQ Six-sigma quality process is all about.



We do this because we understand how damaging inconsistent consumables can be:

- Potential torch damage
- Valuable production time wasted
- Increased scrap rates
- Expensive rework

The costs are simply not worth the risk of using non-Hypertherm torches and consumables.



After the same number of starts, the Hypertherm electrode on the left shows a well-centered pit and is about half used. Due to poor manufacturing, the non-Hypertherm part on the right has eroded past the hafnium insert and must be replaced prematurely.

## **Our technology delivers value**

Most of the performance of a plasma system happens in the torch. Highpressure gas flows are controlled by the features and positioning of the consumables to shape the 40,000° F plasma arc. As we say at Hypertherm, "The shape of the arc is the shape of the cut."

We employ the world's largest team of plasma process engineers to develop designs that accomplish the complex task of shaping, constricting and centering the plasma arc. Our designs deliver superior cut performance, while sufficiently cooling the consumables to provide you with the longest-lasting consumables available.







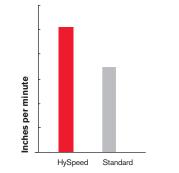
#### Our patented technology provides

- Superior cut quality and reduced or eliminated secondary operations
- Faster cutting speeds and greater thickness capabilities
- Dramatically longer consumable life
- Lower operating cost and higher productivity

New technologies are regularly brought back to past systems to deliver more value to existing Hypertherm system owners.

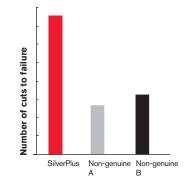
#### Faster cut speed

Example: 43% speed increase with HySpeed on the HT2000



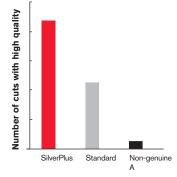
#### Longer consumable life

Example: Up to three times longer life with SilverPlus on the HD3070



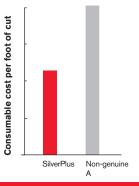
#### **Consistent cut quality**

Example: Superior cut quality with SilverPlus on the HT4400



#### Lower operating cost

Example: Nearly half the operating cost with SilverPlus on the HT2000



## **Technology products**

Hypertherm system	Technology product	Benefit	Literature and kits available
All Powermax (except Powermax190 <sup>®</sup> and 1100)	FineCut <sup>™</sup> consumables	High-quality cuts on thin gauge material.	Brochure <u>Consumables starter kits</u> Powermax600 P/N 128886 Powermax600CE P/N 128887 Powermax1000/1250/1650 P/N 128888 Powermax1000/1250/1650 P/N 128889
MAX42 <sup>®</sup> MAX43 <sup>®</sup> Powermax600 <sup>®</sup> Powermax800 <sup>®</sup> Powermax900 <sup>®</sup>	<b>RT60 retrofit torch</b> Hand torch 25' (7.5 m) leads P/N 083215 Hand torch 50' (15 m) leads P/N 083216 Machine torch 25' (7.5 m) leads P/N 083217 Machine torch 50' (15 m) leads P/N 083218	Brings Powermax G3 Series <sup>™</sup> performance systems – faster cuts, longer consumable life, more durable torch and lead.	Brochure P/N 891610 <u><i>RT60 spare parts kits</i></u> Hand torch consumables P/N 128919 Machine torch consumables P/N 128920
Powermax1100*	<b>RT80 retrofit torch</b> Hand torch 25' (7.5 m) leads P/N 087033 Hand torch 50' (15 m) leads P/N 087034 Machine torch 25' (7.5 m) leads P/N 087035 Machine torch 50' (15 m) leads P/N 087036	Brings Powermax G3 Series performance to Powermax1100 – faster cuts, longer consumable life, more durable torch and lead.	Brochure P/N 891060 <u>RT80 spare parts kits</u> Handheld consumables P/N 128822 Machine torch consumables P/N 128821
HD3070*	SilverPlus™ electrode Electrode P/N 220408 Nozzle P/N 220409 Shield adaptor P/N 220508	100-amp oxygen cutting – on average, doubles electrode life. (Increase voltage by 10 – 15 volts over life of electrode to compensate for deeper hafnium pit).	Head-to-head competitive comparison Quick set-up guide P/N 891630 SilverPlus starter kit P/N 228000
	HyPerformance retrofit torch kit Upgrade kit P/N 228132	Next-generation HyPerformance Plasma now available on the HD3070. Provides more consistent cut quality, increased more consistent cut quality, increased productivity and less than half the operating cost.	Brochure P/N 871150 Mild steel consumable parts kit P/N 228134 Stainless steel consumable parts kit P/N 228137

Hypertherm system	Technology product	Benefit	Literature and kits available
HPR130* HPR260* HPR400XD*	SilverPlus <sup>™</sup> electrode 130 A Electrode P/N 220665 200 A Electrode P/N 220666 260 A Electrode P/N 220668	SilverPlus electrodes wear almost twice as deep as standard copper electrodes, doubling SilverPlus life over a standard copper electrode.	Quick Set-up guide P/N 893040
MAX200* HT2000*	SilverPlus <sup>™</sup> electrode MAX200 Electrode P/N 220083 HT2000 Electrode P/N 220084	200-amp oxygen cutting – on average, doubles electrode life. (Increase voltage by 10 - 15 volts over life of electrode to compensate for deeper hafnium pit).	Head-to-head competitive comparison
	HySpeed <sup>®</sup> consumables (HT2000 only)	Up to 50% faster cutting speeds while maintaining cut quality.	Customer profile, Head-to-head P/N 891050 Quick set-up guide P/N 804560 HySpeed starter kit P/N 128824
HT400* HT4000* HT4001*	SilverPlus electrode Electrode P/N 220397	260-amp oxygen cutting – on average, doubles electrode life. (Increase voltage by 10 - 15 volts over life of electrode to compensate for deeper hafnium pit).	Quick set-up guide P/N 891680
HT4400*	SilverPlus electrode Electrode P/N 220412	300/400-amp oxygen cutting – on average, doubles electrode life. (Increase voltage by 10 - 15 volts over life of electrode to compensate for deeper hafnium pit).	Head-to-head competitive comparison Quick set-up guide P/N 891690 SilverPlus starter kit P/N 228025
HD4070*	HyPerformance retrofit torch 6' (1.8 m) torch leads P/N 128943 10' (3 m) torch leads P/N 128944 15' (4.5 m) torch leads P/N 128945	Next-generation HyPerformance Plasma now available on the HD4070. Provides more consistent cut quality, increased productivity and less than half the operating cost.	Brochure P/N 870020 Consumable parts kit P/N 128946

## Understanding the true cost of cutting

The true cost of your cutting operation is only fully understood by looking at how productive your cutting system is and what it costs to operate over time.

#### Consumable cost over time

A function of consumable technology and system operation! (=price per set X sets used per month)

#### Cost of consumable changeovers over time

(=number of changes per month X time per change X labor and overhead rate)

#### Cost of lost production from changeovers

(=hours of downtime per month X value of production per hour)

#### Cost of lower productivity, quality and inconsistency

- Scrap and edge rework time from inconsistent cut quality
- Lost sales and business opportunities due to lower productivity and quality
- Downtime, emergency service and damaged torches from inconsistent consumables and catastrophic failures



## Getting the most from your investment

We understand your Hypertherm plasma system better than anyone and are ready to give you the support you need and to show you how to get the most from your system. High-quality consumables do not make up for an improperly functioning machine. Correct operation and regular preventive maintenance are critical to optimum performance.

#### Key operating points

- Match the consumable parts to the amperage and material
- Ensure proper torch height during piercing and cutting
- Check the gas pressure and the integrity of the gas delivery system
- Look for the "HT" laser mark to verify that you are using Hypertherm consumables

Preventive maintenance (PM) always costs less than an emergency repair and will pay for itself many times over from improved system performance. Working with your Hypertherm partner, we can train you and your operators and provide everything you need to maintain your system in peak condition. PM schedules are available for most systems.

## **Ensuring optimal performance**

Optimal performance from your consumables translates into higher quality parts, more efficient operations and lower operating costs for your plasma system. Because of our focus on technology, quality and service, using Hypertherm consumables is the best way to ensure optimal performance.



## hypertherm

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