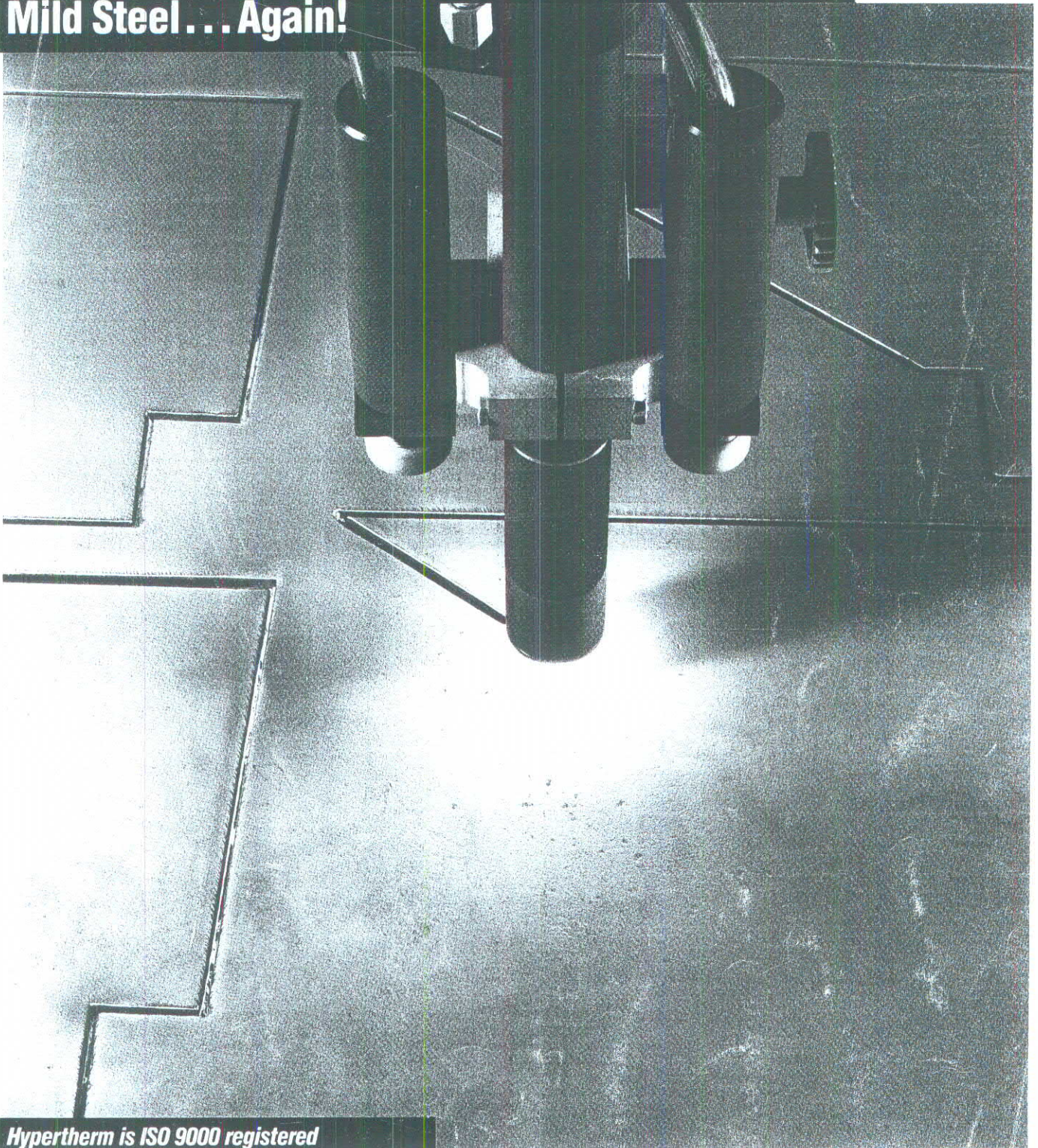


**HYPER THERM**<sup>®</sup>

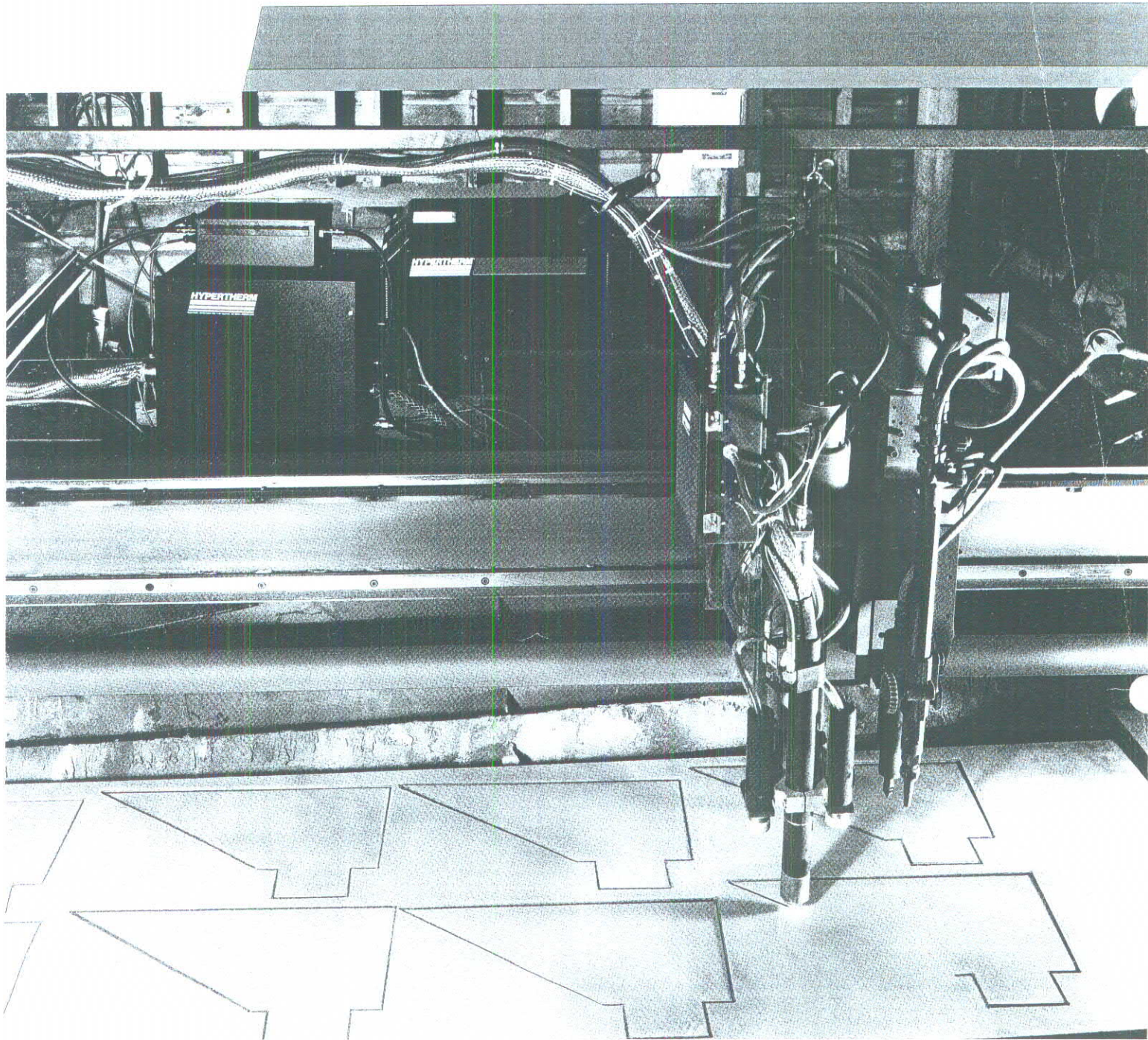
**HT2000**

**HT2000 DUAL GAS PLASMA CUTTING SYSTEM**  
*Featuring Long-Life Oxygen<sup>SM</sup> Parts Technology*

**Hypertherm Reduces the Cost of Cutting  
Mild Steel... Again!**



*Hypertherm is ISO 9000 registered*



***With the HT2000, the benefits of using oxygen plasma to cut mild steel are now combined with exceptionally long consumable parts life.***

### **THE OXYGEN PROCESS**

In 1983, Hypertherm revolutionized mechanized plasma cutting by introducing oxygen plasma as the process of choice for cutting mild steel. Key benefits of oxygen plasma cutting are:

- ▣ No dross across a wide cut range
- ▣ Faster cut speeds at lower power levels
- ▣ Superior weldability of the cut face

The only drawback of the oxygen process was the shorter consumable parts life it delivered. In the HT2000, this drawback has been eliminated.

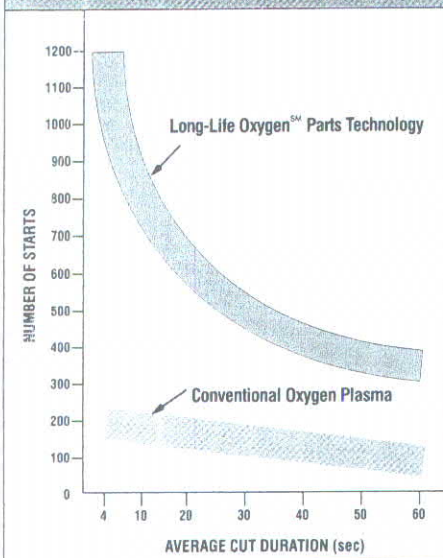
### **LONG-LIFE OXYGEN<sup>SM</sup> PARTS TECHNOLOGY**

The HT2000 mechanized plasma cutting system incorporates Hypertherm's patented\* Long-Life Oxygen<sup>SM</sup> technology, a breakthrough development that represents a signifi-

cant advance in the effort to lower the cost of cutting mild steel. Compared with conventional oxygen plasma cutting, Long-Life Oxygen technology extends electrode life by as much as six times, under certain operating conditions. Depending on usage, this could represent significant savings in just one year. And, unlike competitive systems, the HT2000 does not require one consumable for long life and another for high quality cutting. The HT2000 delivers both long life and high quality with the same set of parts.

*\*Patents pending worldwide*

## LONG-LIFE OXYGEN<sup>SM</sup> PARTS TECHNOLOGY COMPARED TO CONVENTIONAL OXYGEN PLASMA ELECTRODE LIFE



## THE HT2000: A COMPLETE MECHANIZED PLASMA CUTTING SYSTEM

The HT2000 200-amp dual-gas plasma system is specifically designed to interface easily to X-Y tables, punch press and robotic installations. A microprocessor provides precise control over such functions as current output and gas flow, ensuring clean, square cuts and long parts life. Further, the HT2000 features a Remote High Frequency (RHF) console that gives you the flexibility of locating the power supply up to 200 feet (60m) from the torch. It is capable of production cutting metals up to 1-inch (25mm) thicknesses. And, the HT2000 is rated at 100% duty cycle at 30Kw output for maximum productivity.

## SUMMARY OF BENEFITS

Since 1968, Hypertherm has been supplying industry with the highest quality, most technologically advanced automated plasma cutting systems. Our primary objective has been to deliver the lowest cost per foot of cutting metal. The HT2000 is the latest milestone to evolve from this tradition.

Below is a summary of the key features and benefits delivered by the HT2000.

■ **Long-Life Oxygen<sup>SM</sup> Parts Technology.** This patented\* advance gives you the benefits of oxygen cutting on mild steel without making you sacrifice parts life. Long-Life Oxygen Parts Technology yields electrode life many times that possible with conventional oxygen plasma systems. Depending on cut duration, a single electrode may deliver up to 1200 starts before needing replacement, significantly reducing your overall cost of cutting compared with conventional oxygen systems.

■ **Dual-gas system.** The HT2000 is a dual-gas system. In addition to cutting with oxygen, it can utilize Air, N<sub>2</sub>, and Ar-H<sub>2</sub> (Ar-H<sub>2</sub> use requires a special manifold) as plasma gases in combination with Air, N<sub>2</sub> or CO<sub>2</sub> as shield gases. This enables the operator to achieve optimal results on all metals, including mild steel, stainless steel and aluminum.

■ **200-amp, 30Kw power output.** The HT2000 features a 200-amp power supply that delivers 30Kw output power. Its production capacity is one inch (25mm) on most metals at speeds far exceeding those possible with oxyfuel or other methods. Productivity is increased, greatly reducing the overall cost of cutting.

■ **100% duty cycle.** At 30Kw output, or throughout its entire production cutting range of up to one inch (25mm), the HT2000 is rated at 100% duty cycle. Productivity is maximized, while costs are minimized.

■ **Variable control of output.** Power output may be adjusted from 40 to 200 amps, giving the HT2000 the flexibility to cut materials ranging in thickness from 26 gauge (.5mm) to one inch (25mm) at production speeds.

■ **Microprocessor control.** A built-in microprocessor provides precise control over such critical factors as current output and gas flow, further contributing to excellent cut quality and long consumable parts life.

■ **Torch front-end shielding.** Unique to Hypertherm equipment, this patented\* technology electrically isolates the nozzle from the workpiece and at the same time provides physical protection from molten spatter generated during piercing. No competitive system

in its class has the piercing capability of the HT2000, so important in mechanized cutting applications.

■ **Long-Life coupled with high quality.** Unlike competitive systems, the HT2000 delivers long oxygen parts life *and* high quality cutting with the same set of parts. You do not have to choose between long parts life and cut quality.

■ **Torch Height Control and Initial Height Sensing Systems.** Torch Height Control (THC) and Initial Height Sensing (IHS) are available on the HT2000 for totally automatic positioning of the torch, further increasing productivity in mechanized cutting applications.

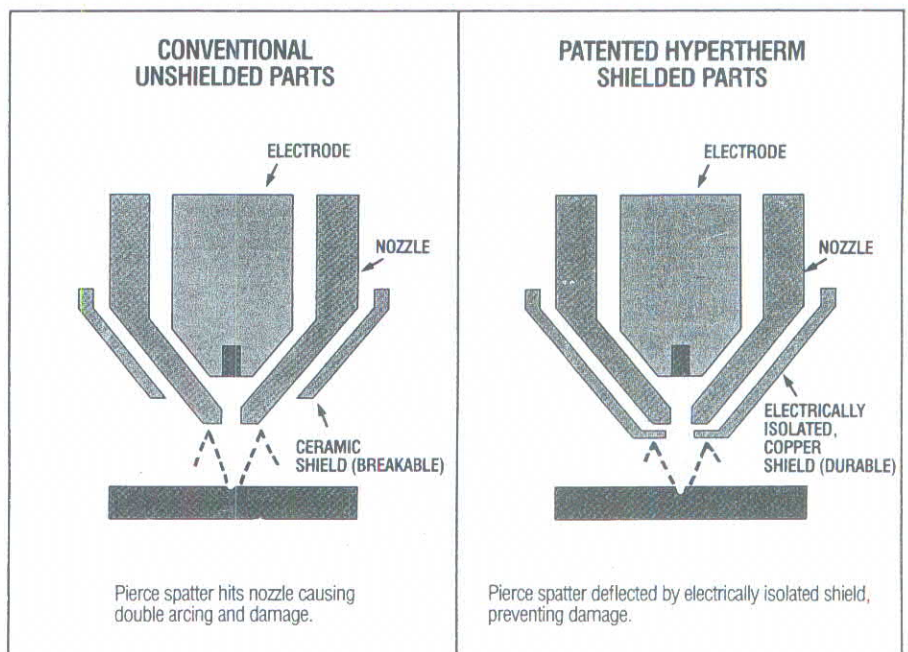
■ **Liquid-cooled torch.** The liquid-cooled torch provides exceptional cooling, further contributing to the HT2000's long consumable parts life and low overall operating costs. The cooling system is self-contained and built into the power supply for added convenience.

■ **Remote High Frequency (RHF) console.** A Remote High Frequency (RHF) console gives you the flexibility of locating the power supply up to 200 feet (60m) from the torch. High frequency interference is minimized.

■ **Indicator panel.** A full set of easy-to-read indicator/diagnostic lights monitors the status of the RHF console door, transformer temperature, coolant level, plasma and shield gas pressures, coolant temperature and coolant flow. Troubleshooting is greatly simplified.

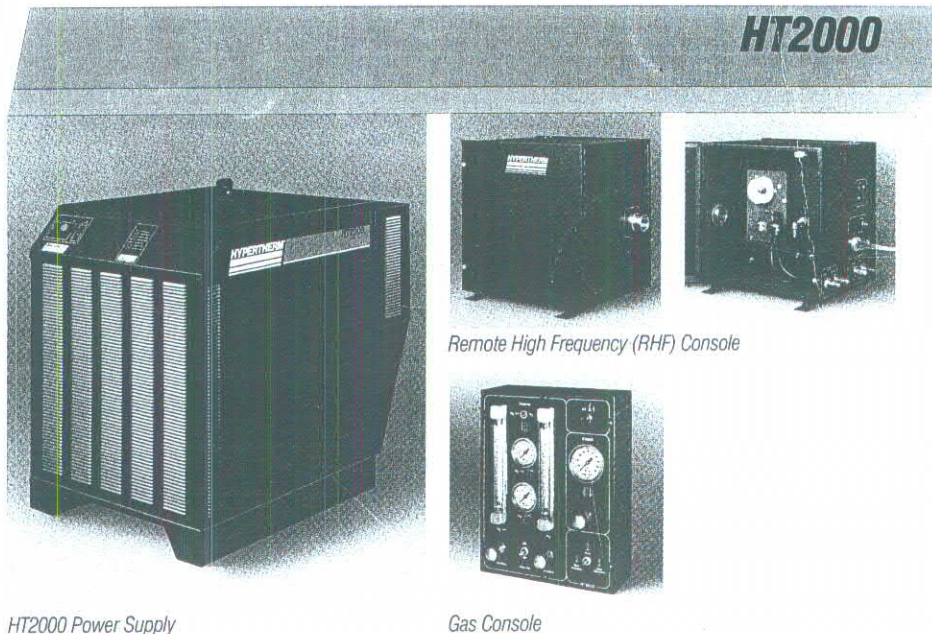
■ **Superior warranty and service.** As with all Hypertherm equipment, the HT2000 is backed by a full two-year warranty on the power supply and one-year coverage on the torch. Training and field service are available worldwide.

\*Patents pending worldwide.



## System Components:

- Power Supply
- Machine Torch Assembly
- Torch Leads
- Work Cable
- Torch Coolant
- Gas Console
- Motor Valve Console
- Remote High Frequency (RHF) Console
- Interconnecting Leads and Cables
- Initial Height Sensing (IHS) Console (Optional)
- Remote Voltage Control (Optional)
- Argon/Hydrogen Console (Optional)
- Water Muffler and Pump (Optional)



HT2000 Power Supply

Gas Console

## Specifications:

<b>Model Number:</b>	HT2000
<b>Input Voltage:</b>	200V, 3ph, 50Hz 208V, 3ph, 60Hz 220/380/415V, 3ph, 50Hz 240/480V, 3ph, 60Hz 600V, 3ph, 60Hz
<b>Input Current: @ 30 Kw Output</b>	108 Amps, 200V 104 Amps, 208V 98/57/52 Amps, 220/380/415V 90/45 Amps, 240/480V 36 Amps, 600V
<b>Output Voltage:</b>	150 Volts DC
<b>Output Current:</b>	40 to 200 amps
<b>Duty Cycle:</b>	100%
<b>Maximum OCV:</b>	280 Volts DC
<b>Dimensions:</b>	35½" (900mm) Height 28¼" (710mm) Width 41¼" (1040mm) Depth
<b>Weight:</b>	780 Lbs. (351 kg)
<b>Gas Supply:</b>	
<b>Plasma Gas:</b>	O <sub>2</sub> , Air, N <sub>2</sub> , Ar-H <sub>2</sub>
<b>Plasma Pressure:</b>	120 PSIG (8.3 bar)
<b>Plasma Flow:</b>	80 SCFH (38 l/min.)*
<b>Shield Gas:</b>	Air, N <sub>2</sub> , CO <sub>2</sub>
<b>Shield Pressure:</b>	90 PSIG (6.2 bar)
<b>Shield Flow:</b>	280 SCFH (132 l/min.)*

\*Maximum flow rate; actual rate varies according to cutting requirements.

For additional information  
Call TOLL-FREE in USA & Canada:  
**1-800-643-0030**

## Operating Data:

**Production Cutting Capacity (Piercing): 1" (25mm)**  
**Maximum Cutting Capacity (No Piercing): 2" (50mm)**

MATERIAL	THICKNESS		CURRENT	APPROXIMATE TRAVEL SPEED	
	(inches)	(mm)		(IPM)	(mm/min)
MILD STEEL (O <sub>2</sub> Plasma/Air Shield)	¼	6	200	160	4060
	⅜	10	200	100	2540
	½	12	200	80	2030
	¾	20	200	55	1400
	1	25	200	35	890
	1¼	32	200	22	560
	1½	38	200	15	380
STAINLESS STEEL (Air Plasma/Air Shield)	¼	6	200	195	5000
	⅜	10	200	145	3700
	½	12	200	105	2700
	¾	20	200	55	1400
	1	25	200	30	760
	1¼	32	200	15	380
	1½	38	200	10	250
ALUMINUM (Air Plasma/Air Shield)	¼	6	200	190	4800
	⅜	10	200	145	3700
	½	12	200	110	2800
	¾	20	200	65	1650
	1	25	200	35	900
	1¼	32	200	20	500
	1½	38	200	12	300

# HYPERTHERM®

**The World Leader in  
Plasma Cutting Technology**

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