



Plasma Cutting Systems

Plasma-Jet DSL Compact

**Small foot-print Plasma Cutting Systems
for highest quality demands**

- Hypertherm® CNC
- Sensor for automatic torch height control (THC)
- Electro-pneumatically controlled vacuum table
- MTC Nestmaster® Nesting software



Plasma-Jet DSL Compact

PowerMax series air plasma, or HPR plasma technology by Hypertherm Stands for highest standards in cutting quality and cost-effectiveness

- **This compact series offers superior cutting performance and extensive equipment variations = high quality and small footprint plus low investment for maximum cost-efficiency**
- Extremely rigid design for maximum cutting precision
- Dual-drive bridge
- High-quality linear guides on all axes
- Dynamic AC servo drives on all axes with maintenance-free, zero-backlash planetary gears
- Low-wear and low-maintenance helical gears are designed for continuous operation
- Optimum track speed even for fine contours and tight radii
- Automatic torch height control
- Stand-alone cutter table features rigid steel construction for high load capacity
- Adjustable cutting current
- Stand-alone table eliminates thermal and mechanical influences on the plasma cutter system
- Quick-coupling for cutter head changes in seconds
- Minimized tooling time ensure maximum cost savings
- Use the existing cutting parameters stored in the control to find the optimum cut
- Available with tube cutter, and many more options



CNC-Control

- The optimum control for any requirements
- Easy to operate, absolutely reliable and powerful
- With the CutPro Wizard, even inexperienced users can manufacture cut parts after a few minutes

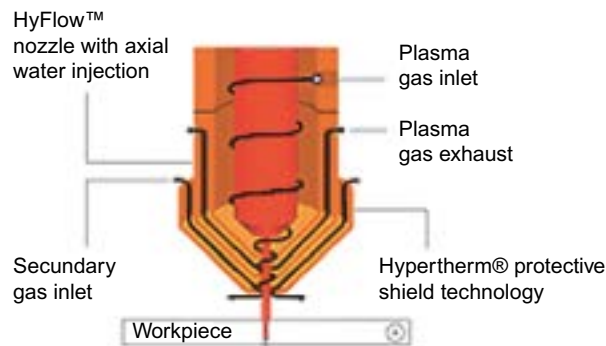


Edge® Pro CNC

MicroEDGE® Pro CNC

HDi™-Technologie

- For superior angularity, glossy cut surfaces, and sharp edges in thin alloyed steel



True Hole®

- This cutting technology for plain carbon steel produces a significantly improved hole quality



Nesting Software

- CAD/CAM nesting software can fulfill the most demanding requirements. Let us help you select the perfect solution for your needs.



NestMaster®

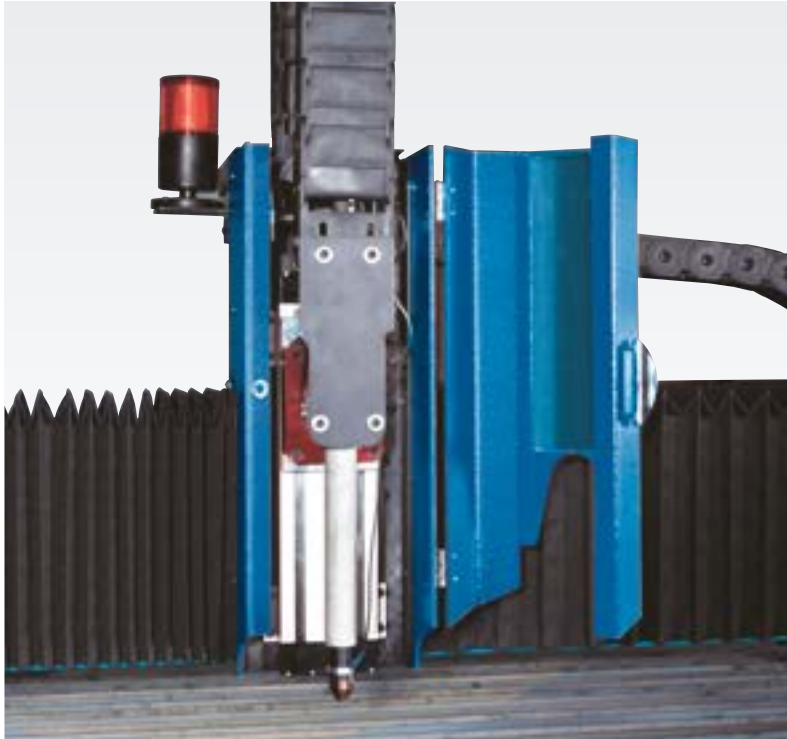


TurboNest®



ProNest®

Specifications DSL Compact		1020	1530
Work area			
Cutting width	mm	1000	1500
Cutting length	mm	2000	3000
Dist. between cutter head and table	mm	150	150
Rapid feed	mm/min	30000	30000
Table load capacity max	kg/m ²	1000	1000
Table height	mm	800	800
Dimensions/Weight			
Total width	mm	1700	2200
Total length	mm	3420	4420
Weight	kg	2050	2550



Standard Equipment

- Hypertherm® MicroEDGE® Pro CNCg
- Hypertherm® plasma source
- Hypertherm® cutter head
- Hypertherm® Nestmaster® nesting software
- Z axis with servo-driven THC
- magnetic torch coupling
- work table with vacuum connector and automatic shutter control
- operator manual and programming instructions

Servo-control for torch height (THC)

- Height sensing and height control via plasma arc for maximum quality and productivity throughout the cutting process

Magnetic torch disengagement

- The magnetic torch coupling reduces not only tooling times, but also ensures more safety for drives and torch in case of a collision

Options	Part No.		Part No.
• Automatic gas console	251 916	• Turbonest® Software Option	251 917
• Manual control unit	251 910	• Mechanical angle cutter	251 933
• Joystick at the machine bridge	251 932	• Filtered exhaust system, 4000 m ³ /h	251 929
• Pronest® Software	251 918	• Filtered exhaust system, 8000 m ³ /h	251 930
• ProNest® Module software option		• Filtered exhaust system, 12000 m ³ /h	251 931
- Gap cutting	251 921		
- Collision prevention	251 919		
- Combined severing cuts	251 920		

Automatic gas console (Hypertherm®)

Part No. 251 916



Filtered exhaust system

- Filter capacity 4000 / 8000 / 12000 m³/h
- Pressure 2500 PA
- Centrifugal vent
- Motor rating 7.5 kW
- Filter size 9x21 m²: 189 m²
- Inlet air pressure 7 bar + 1 bar
- Dimensions 1860x2130x2180 mm
- Weight 1100 kg
- Noise level 75 dB

4000 m³/h Part No. 251 929

8000 m³/h Part No. 251 930

12000 m³/h Part No. 251 931





Tube Cutter (optional)

- Cuts round and square tubes
 - 30 - 140 mm Ø
 - 20 x 20 - 100 x 100 mm ☒
 - - max. part weight 100 kg
- Part No. 251 915

True Hole Technology (Part No. 251 916 and 251 918)

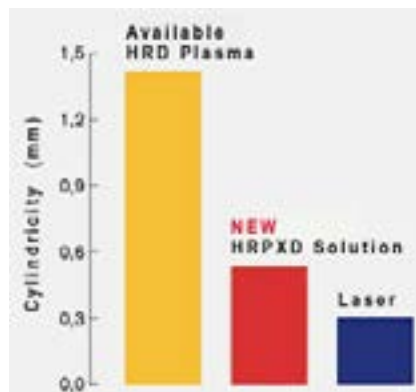
Revolutionary plasma power: True Hole® cutting quality

True Hole cutting technology* (patent pending) for plain carbon steel produces a significantly better cut hole quality than conventional plasma cutting. Plus, everything runs fully automated without any operator intervention.



What benefits does True Hole Technology bring?

- It produces high quality bolt holes fully automatic with only minimal operator intervention
- It eliminates the bevel that is typical for holes cut with plasma technology
- It reduces unevenness by shifting it to the outside of the hole, where it cannot interfere with the bolt
- Some minor burrs do exist, but can easily be removed



How does the hole quality compare to laser-cut holes?

The hole cylindricity projection that was typical for laser cuts has been reduced. See chart below. Please note that deviations in hole size continue to exist as in all plasma processes.

10 mm holes, 9.5 mm plain carbon steel plate, 130-A process

Cylindricity is a measure for the hole quality.

True Hole Technology requires a HyPerformance Plasma HRPXD Auto Gas System with True Hole-capable cutting table, nesting software, CNC, and torch height control. For more information, contact the cutting table manufacturer.

Plasma Sources

Powermax 105[®] • Max Pro 200[®] • HPR 130 XD[®] • HPR 260 XD[®] • HPR 400 XD[®]

These plasma sources fulfill all the needs of a powerful, heavy-duty plasma cutting system - they are simple, reliable and unbelievably productive

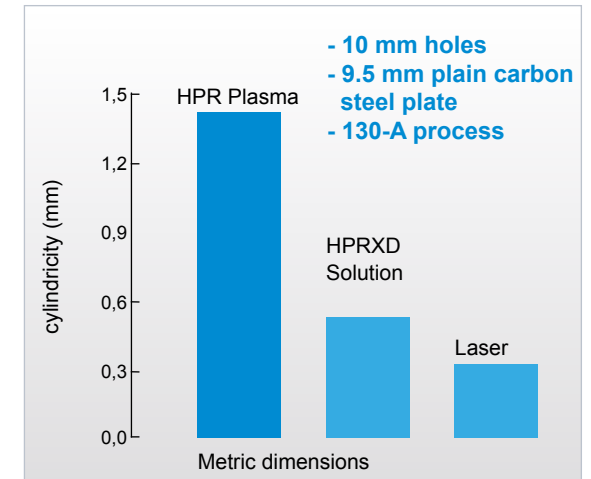
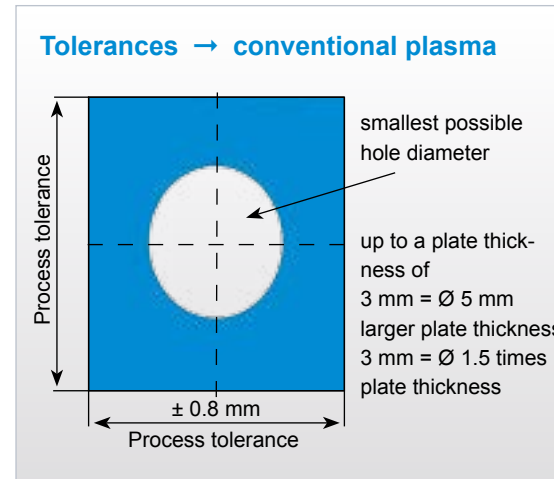
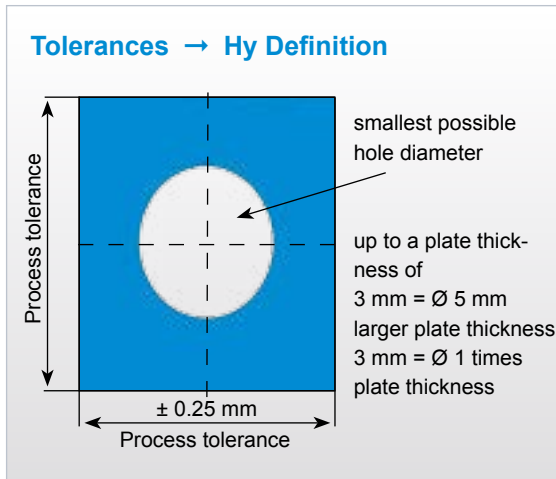


- Superior cut quality and durability
- Maximized productivity
- Minimized operating cost
- Unsurpassed process flexibility

Plasma Source		Powermax 105 [®]	Max Pro 200 [®]	HPR 130 XD [®]	HPR 260 XD [®]	HPR 400 XD [®]
Cutting capacity in plain carbon steel						
Virtually burr-free	mm	-	20	16	32	38
Hole cutting capacity in production	mm	22	32	32	38	50
Cut-off (edge-start)	mm	38	75	38	64	80
Cutting capacity in steel alloy						
Hole cutting capacity in production	mm	-	25	20	32	45
Cut-off (edge-start)	mm	-	64	25	50	80

Plasma Sources

Powermax 105[®] • Max Pro 200[®] • HPR 130 XD[®] • HPR 260 XD[®] • HPR 400 XD[®]



Tolerances for Plasma Cutting

Dimensioning of cut using a ring as an example:

Thickness	Outside	Inside
1.5 to <70 mm	- 0 / + 3 mm	+ 0 / - 3 mm
70 mm to just below 100 mm	- 0 / + 5 mm	+ 0 / - 5 mm
100 to 150 mm	- 0 / + 10 mm	+ 0 / - 10 mm

ISO 9013 (DIN 2310)

Metric	ISO Range 1		ISO Range 2		ISO Range 3		ISO Range 4		ISO Range 5	
	Deviation	Angle	Deviation	Angle	Deviation	Angle	Deviation	Angle	Deviation	Angle
1.5	0.0021	2.2	0.0063	6.54	0.0163	16.51	0.0327	30.66	0.0493	41.82
3	0.0024	1.1	0.0068	3.21	0.0171	7.97	0.0342	15.64	0.0519	23.05
6	0.0027	0.7	0.0077	1.93	0.0183	4.59	0.0365	9.13	0.0560	13.85
10	0.0031	0.5	0.0085	1.39	0.0195	3.18	0.0390	6.33	0.0604	9.754
12	0.0035	0.4	0.0094	1.17	0.0207	2.258	0.0415	5.15	0.0647	8.00

CNC Control

Hypertherm® MicroEDGE® Pro

Reduce cost by increasing quality and productivity through advanced control technology!

Easy operation

- With the patented CutPro® Wizard, even inexperienced users can produce cut parts in less than 5 minutes
- LAN/WLAN network and USB ports allow loading of parts programs and software updates
- Access documentation with the push of a button, including valuable tips for optimizing cuts, instructions for wear parts replacement and diagnostic tools in several languages
Wizards and support tools for diagnostics allow simple configuration, easy operation, and quick troubleshooting
- Communication is integrated in plasma and torch height control systems resulting in an automated and professional control that is based on factory installed or custom cutting data tables.

Reliable

- Structure and tested load capacity ensure reliable and consistent operation in harsh cutting environments
- Optimum industrial touchscreen with SAW (surface acoustic wave) technology glass ensures superior reliability and consistent operation even under harshest cutting conditions
- Air cooling reduces the load on electronic components, while preventing any dust from entering the system
- Manuals for Hypertherm, CNC and Torch Height Control can be accessed in various languages with the push of a button
- 2 -Year Factory Warranty

- HyDefinition cut quality
- Automatic kerf width compensation according to material thickness, amperage and speed
- Maximized life of wear parts due to automatically set plunge-cut and cutting height

High user comfort

- Offline software automatically sets up cutting process parameters
- Easy configuration of jobs using the CutPro® Wizard
- User is prompted to enter plate/sheet type and consumable part number
- Tips for cut optimization
- Operator manual for CNC, torch height control, and plasma source right on the control panel display
- Diagnostics via internet
- Offline diagnostics via form request or CNC software for the parts program

Standard Equipment

- Operating system: Windows
- Industrial PC with 15" Touchscreen
- Graphic user interface
- USB port