



## Lightning HD

**Hypertherm**  
True Hole Capable Machine

### The Reference Standard for High Precision Plasma Cutting

The Lightning HD machine represents the state-of-the-art in precision plasma cutting. Our machine design engineers have specified precision fabricated and machined structures combined with all-linear bearing guidance, powerful digital drives and precision transmissions to achieve the highest possible cut quality.

Laser machine design principles ensure that the latest Hypertherm HPRXD plasma cutting systems can achieve the best possible results on the Lightning HD. Our customers report that components cut on the Lightning HD machine with HyPerformance HPRXD plasma and True Hole technology from Hypertherm are comparable with laser cut parts in many cases.



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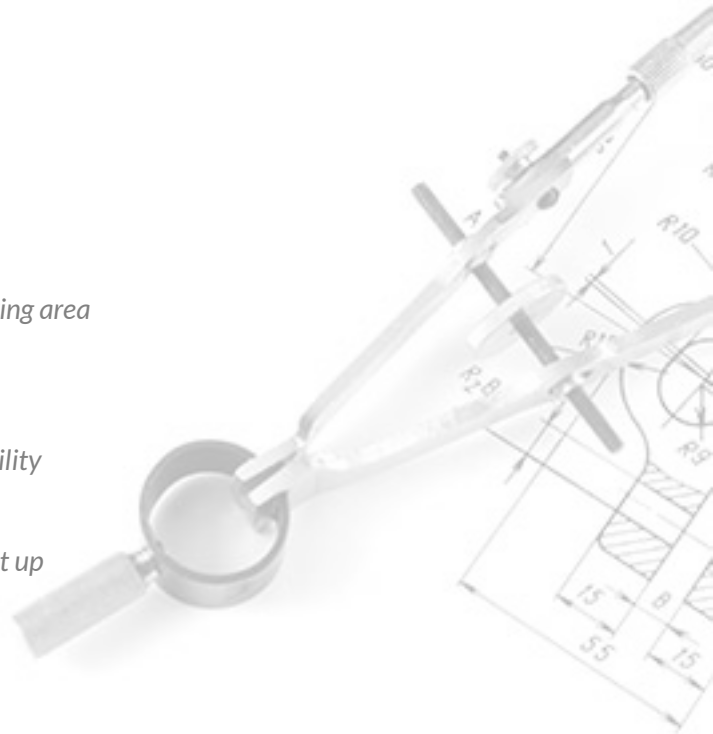


# Lightning HD



## Design Features

- ✔ Heavy duty fabricated & machined construction ...*Accuracy*
- ✔ Range of sizes to suit many applications ...*Flexible*
- ✔ Twin linear bearings in both X & Y axes ...*Smooth motion*
- ✔ Independent heavy duty segmented cutting table ...*Clean working area*
- ✔ Compact machine frame design ...*Small footprint*
- ✔ Powerful AC brushless drives ...*High dynamic performance*
- ✔ Direct drive rack & pinion transmissions ...*Accuracy & repeatability*
- ✔ Ball screw digital torch height control ...*Best cut quality*
- ✔ Laser pen pointer for plate positioning and alignment ...*Easy set up*
- ✔ Torch collision protection ...*Longer torch life*
- ✔ Unique perimeter safety system ...*Safe working area*
- ✔ Hypertherm True Hole capable ...*The best plasma cut holes*



## Lightning HD Applications

- ✔ Steel service centres
- ✔ Machinery manufacture
- ✔ Marine components
- ✔ Automotive components
- ✔ Architectural metalwork
- ✔ Stove manufacturing
- ✔ Offshore components
- ✔ Structural steel
- ✔ General fabrication
- ✔ Agricultural machinery
- ✔ Sheet metalwork

# Designed & Engineered By Experts

## EDGE Pro CNC

The EDGE Pro CNC incorporates all the latest technology for optimised machine performance and ease of use. The fibre-optic digital on-machine network ensures the very best contouring performance for accurate parts. The intuitive user interface via the 15" colour touch screen and on-screen wizards allow even inexperienced operators to achieve great results. Closely integrated with the HPR XD plasma systems, the EDGE Pro exploits plasma's full potential.



## HyPerformance HPR XD Plasma

HyPerformance Plasma cuts fine feature parts with superior quality and consistency, virtually eliminating the cost of secondary operations. Available in four sizes, the HPR XD plasma cutting systems cover all applications. Cutting mild steel, stainless steel and aluminium from gauge to 50mm and beyond, the HPR XD units produce high quality, consistent results over the life of the consumables. HyPerformance plasma delivers unprecedented cutting speed & quality.



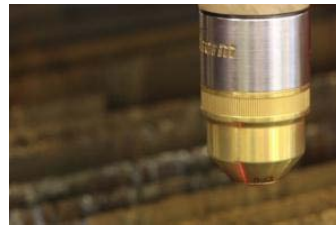
The Lightning HD machine represents the state-of-the-art in precision plasma cutting. Our machine design engineers have specified precision fabricated and machined structures combined with all-linear bearing guidance, powerful digital drives and precision transmissions.



Every Lightning HD machine is fully modelled by our design engineers using the latest ProEngineer 3D solid modelling software to facilitate precision manufacture in our Nottingham factory.



Lightning HD machines feature fully machined fabricated beds fitted with dual machine tool grade linear bearings and precision rack and pinion drives for accuracy and smoothness.



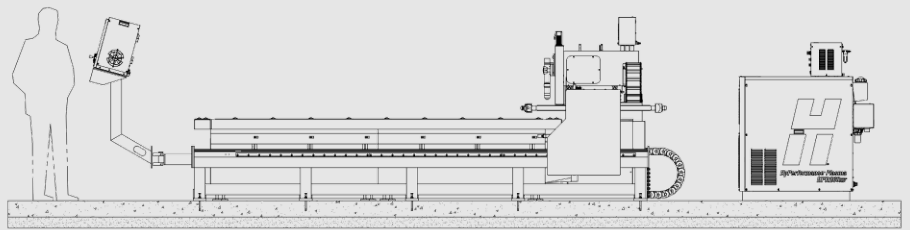
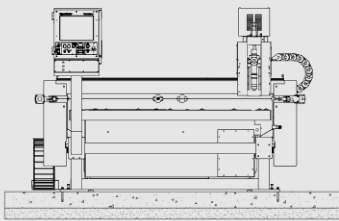
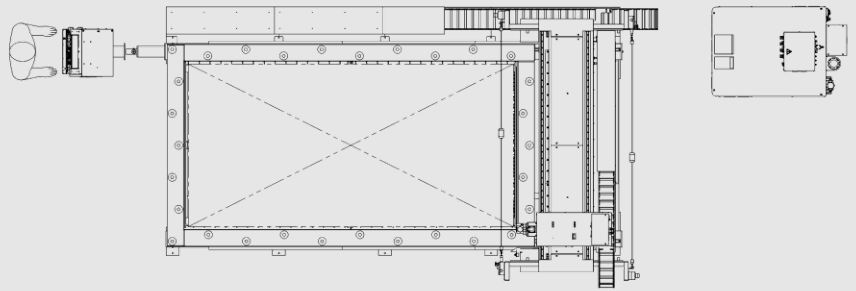
Laser spot identification to locate plate edges simplifies machine setup. One of the many time saving features incorporated into the Lightning HD machine range.



Plate marking for part numbers, bending lines or marking out for assembly is available on the Lightning HD; Arc marking or Pin-matrix marking are available.

## Lightning HD Machine Options

- ✓ HPR130XD - 16 mm dross free mild steel cutting
- ✓ HPR260XD - 32 mm dross free mild steel cutting
- ✓ HPR400XD - 38 mm dross free mild steel cutting
- ✓ Auto or manual gas console
- ✓ Bed sizes 3 x 1.5 m to 8.75 x 2.5 m
- ✓ High speed pin matrix marking
- ✓ Single or twin torch capacity
- ✓ Procut CAD/CAM software



## DESIGN SPECIFICATIONS

Nominal Cut Width	As per machine denomination (e.g. Lightning HD1500 = 1,500 mm)
Nominal Cut Length	3,000 mm, 4,000 mm, 6,500 mm & 8,500 mm
Overall Height	1,695 mm
Maximum Traversing Speed	40 m/min

## OVERALL DIMENSIONS (mm)

		HD1500	HD2000	HD2500
3,000 mm	Width	2,526	3,026	3,576
	Length	5,540	5,540	5,540
4,000 mm	Width	2,526	3,026	3,576
	Length	6,522	6,522	6,522
6,500 mm	Width	2,526	3,026	3,576
	Length	9,312	9,312	9,312
8,500 mm	Width	2,526	3,026	3,576
	Length	11,167	11,167	11,167

## POWER REQUIREMENTS

Input Voltage ( $U_1$ )	415 V / 3 Ph / 50 Hz / Earth / Neutral
Input Current ( $I_1$ )	4.5 A
Input Power ( $U_1 \times I_1 \times \sqrt{3}$ )	3.2 kVA
Recommended Fuse Size	16 A
Recommended Cable Size	2.5 mm <sup>2</sup> 5 core SY Control Flexible Cable



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