

● NEW GASPARINI

SPARK HEAVY

RANGE

 **GASPARINI**

BENDING & CUTTING TECHNOLOGIES



NEW RANGE SPARK HEAVY

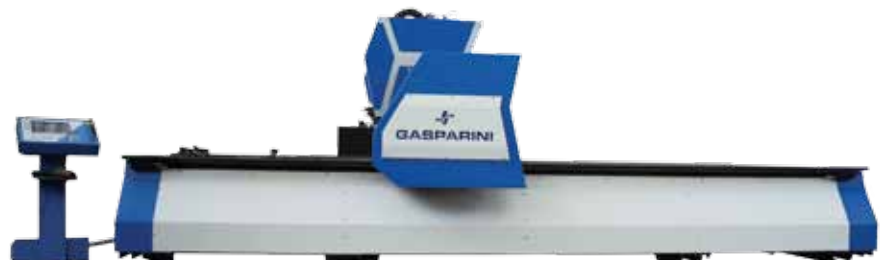
The Spark Heavy high-definition plasma cutting plant is the synthesis of the latest process technologies in this type of manufacturing operation. Several innovative solutions place it at the top of the range in terms of performance, cut quality, ease of use, savings on running costs and product versatility. Last but not least the use of numerical control, which integrates user-friendly controls on board the machine with the most sophisticated offline management systems, nesting and automatic programming.





NEW DESIGN

The new product design, applied to all new Gasparini products, including shears and plasma cutting machines, supports the new Company image and its commitment to innovation. While introducing some state of the art technology, like LED lighting and polycarbonate films, the new design is aligned with three important values, which are among the pillars of the Company's Innovation Strategy: unique, technological, Italian.



EXTREMELY SOLID STRUCTURE

The structure, which is bridge electro-welded, has also been designed for maximum torsional rigidity, freeing up the aisle of the work underneath. In this way one can take advantage of the hood and the burr and debris collection tank.



KINEMATICS

The power and motion transmission is ensured by an electronic gantry system on toothed racks and helical pinions, which are precision ground on the X and Y axes.

- Tolerance on pitch = 0.053 mm/m
- Speed along the X and Y axes: up to 100 m/min
- X and Y axis acceleration: 1g
- Highly flexible platform for special applications.

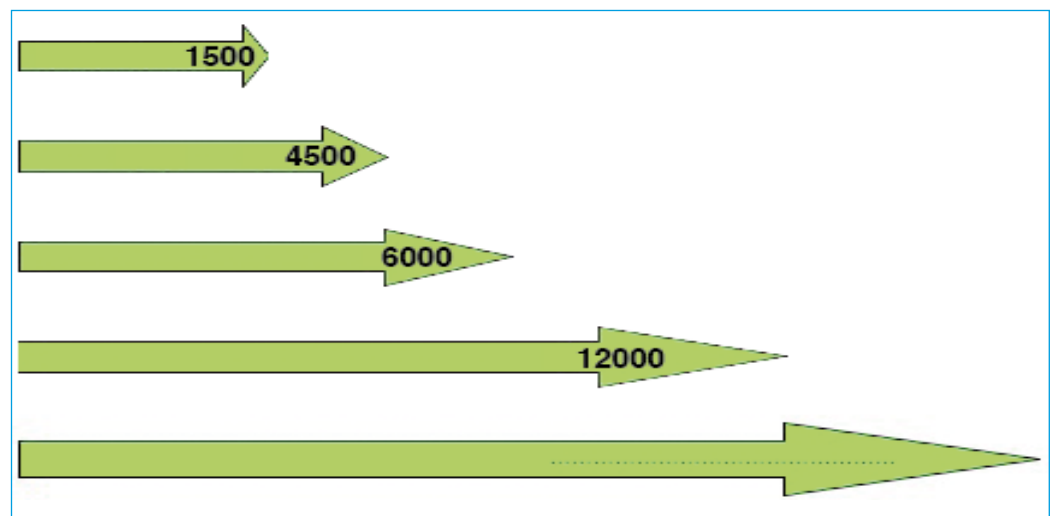
This design concept assures maximum flexibility to the system by facilitating the installation of various accessory heads without affecting the work area or performance.



MODULAR LENGTH MACHINE

The cutting table can be extended at a later date without having to replace the existing plasma machine.

1500	1500 3000 4500	1500 3000 4500	
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I STANDARD CONFIGURATIONS

NEW CLEAN AIR SYSTEM, COMFORT DURING CUTTING OPERATIONS

The innovative vacuum system allows effective removal of cutting fumes, requiring only half the power of conventional systems. This system consists of a movable “decantation” hood, supported by

a chimney chamber, which ensures a high percentage of efficiency of pipes and fume filter over time. The hood fits special protective stainless steel baffles that protect the recovery tank from damage and can be easily replaced in case

of wear. Most importantly, the hood structure is totally independent from the bench and moves through a circuit chain. Gasparini Industries can easily supply the bench with the conventional suction tank system. (“F” version).



INNOVATIVE BURR COLLECTION SYSTEM

The burr collection system has been designed to be particularly user-friendly and to facilitate the operators' work because they do not need to raise the grill to clean the movable hood. Simply select the exhaust hood mode and it will all be conveyed into the burr collection basket, which is easy to handle and easy to empty. The hood moves along the X axis of the machine with the use of a fixed chain with suitable

protection and motorized pinions, one on each side of the tank (left / right). This system requires only 2 square meters at the

back of the machine and most importantly does not need any additional space at the sides of the plasma machine.



CUTTING HEAD



The cutting torch is mounted on a recirculating ball screw, which is precision ground and designed to assure maximum performance in total safety. The automatic cutting torch floating device ensures the correct distance between the nozzle and the material, at any point on the work surface, even in the presence of corrugated metal. In addition, the starting position of the head can be easily and quickly selected by means of the handy laser pointer system. The torch is mounted on a new portal that allows more room for both standard applications such as marker and flame cutting head, and for special applications such as high-precision air spindle etc.

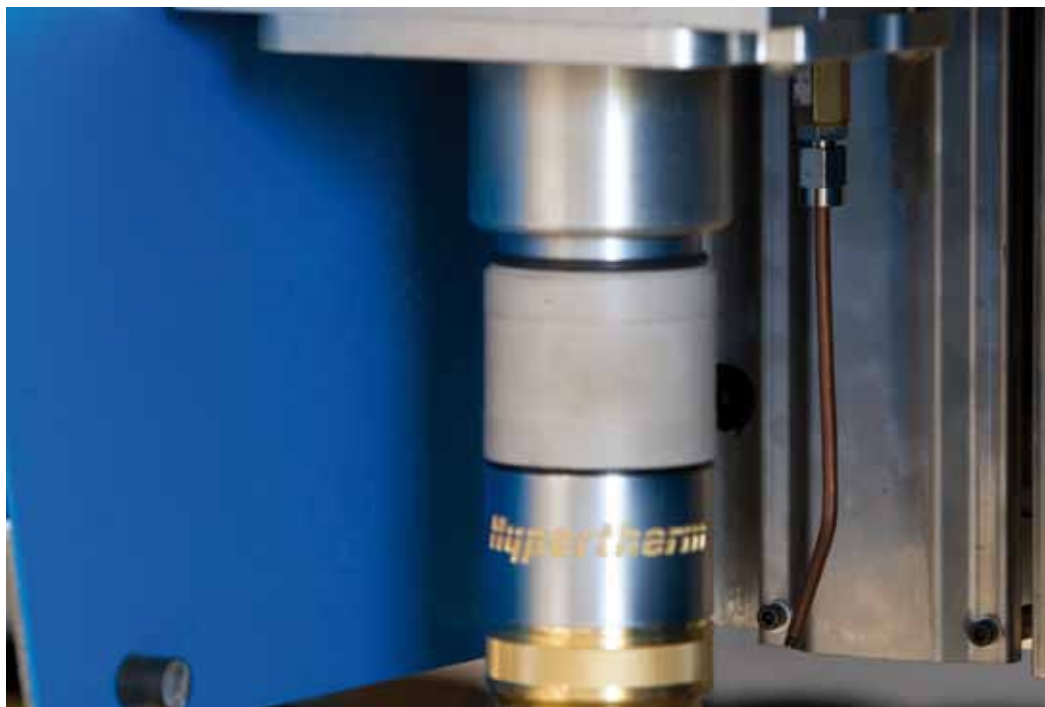
ANTI-COLLISION SYSTEM

The torch housing is designed to absorb any impact during the cutting operation and immediately block the main axes by making the cutting torch move back along its axis to prevent any damage to the system. During this operation, thanks to the orbital pins system it is fitted with, the torch is repositioned perpendicular to the cutting plane so that, once the obstacle has been removed, cutting can be resumed from where it was interrupted.



ANTISPATTER

The torch boasts an innovative “Antispatter system” that increases the operational life of consumables and torch itself. By means of a device aimed at the nozzle, a special, non-flammable, high-pressure fluid is sprayed just before the breakthrough so that the cutting point remains clean and the waste generated by cutting does not stick to the torch.



I SOFTWARE AND CN G-CUT

The control console has a CN developed by Gasparini Industries specifically for use in plasma cutting machines. It offers simple and intuitive management, fully automatic or with manual intervention option at any time.

With the CN, typical parametric forms which have already been entered, can also be executed, that is, programming can be carried out directly at the machine. The GCUT offline software on the other hand, automatically creates machine CAM programming, with advanced options for nesting, parameterizations and cutting mode.



| OPTIONS AND ACCESSORIES

| BEVELLING HEAD

2 D MANUAL BEVELLING HEAD + / - 45°



DRILLING AND TAPPING HEAD

6-tool unit (available on request with 8 tools)

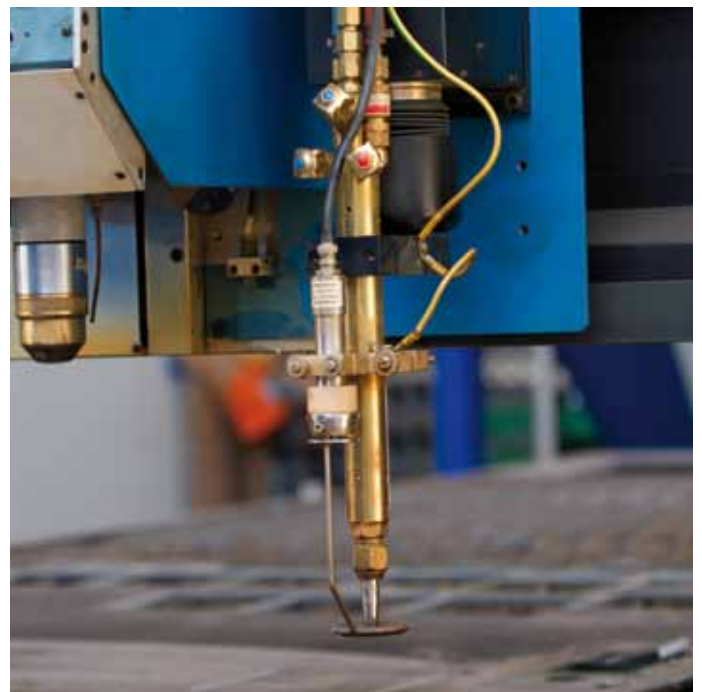
Standard capacity:

- Maximum drilling diameter: 20 mm
- Maximum possible thread: M18
- Available for machines with high crane (350 mm).



OXY-CUT HEAD

- Maximum cutting capacity: thickness 100 mm
- Maximum number of oxy-fuel torches applicable: depending on the width of the bench.

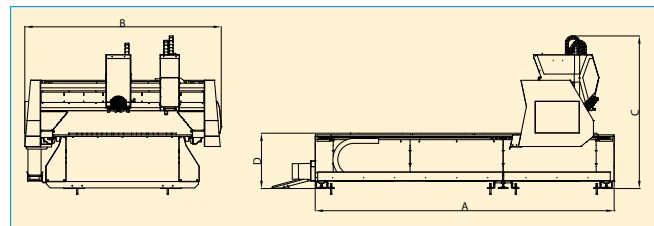


TECHNICAL SPECIFICATIONS

MODEL	Hypertherm model	WORK AREA			OVERALL DIMENSIONS		
		Max sheet metal length [mm]	Max sheet metal width [mm]	Standard vertical axis (Z) stroke [mm]	A Length [mm]	B Width [mm]	C Height [mm]
SH 1530	HPR 130 HPR260	3050	1550	200	5200	3250	2300
SH 2045	HPR 130 HPR260	4530	2050	200	6700	3750	2300
SH 2060	HPR 130 HPR260	6050	2050	200	8200	3750	2300
SH 2080	HPR 130 HPR260	8050	2050	200	11200	3750	2300
SH 20120	HPR 130 HPR260	12050	2050	200	14200	3750	2300
SH 2545	HPR 130 HPR260	4550	2550	200	6700	4250	2300
SH 2560	HPR 130 HPR260	6050	2550	200	8200	4250	2300
SH 2580	HPR 130 HPR260	8050	2550	200	11200	4250	2300
SH 25120	HPR 130 HPR260	12050	2550	200	14200	4250	2300
SH 3060	HPR 130 HPR260	6050	3050	200	8200	4750	2300
SH 3080	HPR 130 HPR260	8050	3050	200	11200	4750	2300
SH 30120	HPR 130 HPR260	12050	3050	200	14200	4750	2300
SH 30150	HPR 130 HPR260	15050	3050	200	17200	4750	2300
SH 30180	HPR 130 HPR260	18050	3050	200	20200	4750	2300
SH 35120	HPR 130 HPR260	12050	3550	200	14200	5250	2300
SH 35150	HPR 130 HPR260	15050	3550	200	17200	5250	2300

* Speed and acceleration depending on the number of heads installed

** Every model can be supplied with the conventional down draft table ("F" version. Required for HPR400)



DIMENSIONS AND WEIGHT			MAX SPEED*		MAX ACCELERATION*		ACCURACY					
D	Height of working bench [mm]	Approx. Weight [t]	Max speed X axis [m/min]	Max speed Y axis [m/min]	Max acceleration on X axis [m/s ²]	Max acceleration on Y axis [m/s ²]	X axis - positioning [mm]	X axis - repeatability [mm]	Y axis - positioning [mm]	Y axis - repeatability [mm]	Z axis - positioning [mm]	Z axis - repeatability [mm]
10	916	3.5	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	4.5	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	5.0	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	6.0	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	7.0	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	5.0	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	5.5	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	6.5	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	8.0	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	9.0	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	10.0	95	100	9	9	0.1	0.05	0.1	0.05	0.05	0.03
10	916	11.5	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	13.0	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	14.5	95	100	9	9	0.2	0.05	0.1	0.05	0.05	0.03
10	916	15.0	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03
10	916	16.5	95	100	9	9	0.15	0.05	0.1	0.05	0.05	0.03

