



NEW MAXI – CNC Gas and Plasma Cutting Machine

Basic equipment

- **NEW** fully welded beam without bolted joints
- **NEW** two linear bearing in cross axis
- **NEW** AC servomotors
- cutting speed 0–20 000 mm/min.
- digital synchronization in longitudinal axis
- **NEW PIERCE 19"** control system with touch screen
- floating cutting heads
- electric ignition
- **NEW** arc voltage height sensing of plasma torch
- automatic piercing with HI-LOW preheating
- torch selection from control system
- **NEW** automatic initial height sensing of plasma torch
- capacitive height control of oxy-fuel torch
- **NEW** automatic gas console
- parking facility for heads out of cutting area
- limit switch in each axis

Optional equipment

- plasma system by customer request
- pneumatic anti-collision system
- pneumatic, plasma or inkjet marker
- drilling head
- **NEW** air cooling for gas cutting
- control system heating (for winter operation)

Technical specification

MAXI	4 000	4 500	5 000	5 500
max. number of torche	6			
rail span	4 000 mm	4 500 mm	5 000 mm	5 500 mm
cutting width* – 1 torch	3 600 mm	4 100 mm	4 600 mm	5 100 mm
cutting width* – 2 torches	3 600 mm	4 100 mm	4 600 mm	5 100 mm
cutting width* – 3 torches	3 600 mm	4 100 mm	4 600 mm	5 100 mm
cutting width* – 4 torches	3 600 mm	4 100 mm	4 600 mm	5 100 mm
cutting width* – 5 torches	3 500 mm	4 000 mm	4 500 mm	5 000 mm
cutting width* – 6 torches	3 350 mm	3 850 mm	4 350 mm	4 850 mm
cutting length	by customer request			
min. parallel cut	90 mm			
cutting speed	0–20 000 mm/min.			
cutting thickness	up to 200 mm			
machine width	4 710 mm	5 210 mm	5 710 mm	6 210 mm
machine length	1 525 mm			
machine height (including rails)	1 800 mm			
cutting table height	700 mm			
plasma system	by customer request			
supply voltage	230V/50Hz			

* Technical data is valid for the application of oxy-fuel torches.
For data of alternative machine configurations, please, contact us.

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PIERCE
CONTROL AUTOMATION

Because of its size and design the **MAXI** CNC cutting machine is intended for a cutting of large and mass-produced products with the requirements on a high productivity and extreme load. It is prepared for a combination of various cutting technologies and it is designed for applications in the most demanding productions.

Modified design

The machine modified design is based on the requirement of an extreme load in heavy-duty services. Reliability and safety were the most important aspects, which were taken into account during the machine design in addition to robustness and resistance. All manufacturing processes from the welding processes up to very precise processing of guiding surfaces, high quality surface finishing and machine testing are monitored and controlled carefully during the machine manufacture.

EXTRA robust travel track

Rail type of track with worked prisms is designed so that it can withstand a high load of the machine and environment as well. Modular version enables an additional elongation of the track.

Fully welded beam without bolted joints

Special welding technology and long-term experience in the area of the cutting machine manufacturing enable production of the machine beam as one complete unit. This design secures a high rigidity of the machine, which is important during its movement. Double wiper system ensures removal of dust and residuals of melted metal.

Two linear bearing in cross axis

Combination of horizontal and vertical fit is perfect from the standpoint of their moment load. Very smooth run of transversal supports without any vibrations and extension of linear bearing service life are the main consequences of this arrangement.

Powerful AC servomotors

New servo-system enables to reach the machine travel speed up to 35 m/min. It secures a sufficient acceleration and deceleration of the machine even during the highest required cutting speed in combination with epicyclic gear cases. The entire system is equipped with auto-diagnostics and it has a very high reliability. The motors are synchronized digitally in the longitudinal axis and they work with nearly zero deviation.

Parking facility for heads out of cutting area

The beam design enables a parking of a head, which is not used currently, out of the cutting area. It means in practice that there is no decrease of cutting width, if the machine is equipped with a higher number of heads.

Limit switch in each axis

All terminal positions of the machine and cutting heads are protected by adjustable terminal switches.

High level of automation

MAXI series machines can be supplied with the highest level of automation. As a standard the machine is equipped with the control system with a big 19" touch display, auto-diagnostics, maintenance manager, automatic gas cantilever beam for oxyacetylene cutting, choice of heads and also with other automatic functions for oxyacetylene as well as plasma cutting technologies.

Protection against radiant heat

Inner side of the machine beam is equipped with a protection layer against radiant heat, which is released during cutting of materials with a higher thickness. Distribution system of compressed air, which is used for an additional cooling, is installed in the cantilever beam as well as the cutting heads. The protection layer together with the cooling system prevents any overheating of the machine or its parts. This arrangement has a direct impact on a preservation of permanent accuracy of the cutting as well as on an extension of service life of individual parts.

