



Steel Max: Bevel - ISO40 - Cross tube cutting

/// TECHNICAL SPECIFICATIONS

- Strong and resistant mechanical structure, composed by monobloc crossbeams and modular lateral metal struts.
- Monolithic aluminium crossbeam.
- Fumes aspiration with separate unit.
- Pinions and racks directly integrated along the X and Y axes.
- Ball screw for Z axis.
- Brushless type axes engines.
- Automatic torch height control with anti-collision device.
- New aesthetic and functional design.



Removable trolleys for waste collection



/// EFFICIENCY AND PRACTICALITY

The exhaust system and slag evacuation is performed in separate sectors (Sector Cleaner); the sectors opening is managed by the Numeric Control program according to the actual position of the torch during the cutting. Cutting table with fume extraction units separated from the structure. Quick cleaning through easily removable trolleys for waste collection or with upper removable trays (recommended for frequent cutting of thick layers).



/// EXHAUST AND FILTERING UNIT

The unit can work with cartridge or with sleeves with timed pneumatic shaker. It keeps the workplace clean and it retrieves warm air in the cold season. It can be installed indoor or outdoor.

MADE IN ITALY PRODUCT - Every single part is manufactured in our workshops.

/// NUMERICAL CONTROL

HARDWARE FEATURES

- Intel® Core™ i5 processor
- 120 GB SSD or higher
- 4 GB of RAM or higher
- 1 RS232 serial output
- 2 USB3 outputs + 2 USB2 ports
- 15" monitor TFT with 1024x768 resolution and touchscreen panel
- 2 Ethernet IO/100 TCP / IP network card
- FlorenZ real time operating system

TECHNICAL FEATURES

- Part-program type g-code
- Up to 10 simultaneous coordinated axes programmable in a block
- Reading speed up to 11000 blocks / sec (G1 / G2 / G3 blocks from internal memory)
- Execution of large part-programs in DNC from hard disk
- Dynamic look-ahead, over 500 blocks
- Sophisticated jerk control to limit mechanical stress
- Algorithms for high speed
- Canned cycles and machining macros
- Management of bi-rotary heads and roto-tilting tables (RTCP) for vanes, impellers, molds, ...
- Gantry axes management
- Multiprocess: max 6 simultaneous and independent processes



Example CNC monitor

- Control up to 32 digital and 16 analog axes
- FlorenZ operating system (D.electron distribution based on Linux)
- Applications D.electron for operator interface and commissioning
- Integrated plc with bi-directional real-time access to CNC data
- PLC fast sections up to 2 mS, synchronized with the part-program
- Editor, debugger, digital oscilloscope for integrated PLC
- Secure data storage function (black box)
- Easy digital axis calibration
- Connection to lan via ethernet TCP / IP
- Teleservice via the internet

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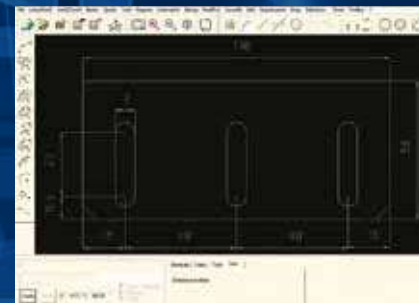
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/// PLASMA CUTTING SYSTEM ///

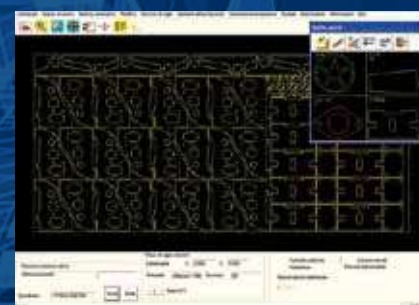
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HIGH PERFORMANCE MACHINERY
STEEL MAX

ADVANCED LINE COMPLETE OF SOFTWARE



CAD

Cad is a 2D drafting software easy to use, powerful and intuitive, specific for sheet metal working. In addition to the drafting of shapes, it can import and modify dxf files, and retrieve shapes from a scanner.



CUT

The Cut software, for shapes allocation (Nesting), is a powerful, versatile, easy to use product specific for plasma and oxy-fuel cutting. This software manages work and production orders

DRAWING SOFTWARE FOR WORKING SETTING

- ::: 2D drawing of the shapes
- ::: Detection of double identities and open paths
- ::: Import files in DXF / DWG format
- ::: CAM for piece allocation (Nesting)
- ::: Management of orders and batch production
- ::: Integration between automatic and manual nesting
- ::: Automatic management of cutting parameters
- ::: Options that reduce the number of triggers (entrances and exits of cutting paths, common cuts, bridges)
- ::: Recovery of scraps and internal cavities
- ::: Multi head management (plasma, oxy-fuel, drilling)
- ::: Production data statistics (costs, times and surfaces)
- ::: Limitation of primers for a longer life of consumables

- (decks, shared cuts, movements with lit flame)
- ::: Entry and exit of the cuts, differentiated for each thickness
- ::: Direct passage of the shapes between drawing and nesting
- ::: deletion / redoing of multi-level changes
- ::: graphic addition of shape on the plane by dragging mode
- ::: parametric parts library for aspiration, conditioning, insulation (optional)
- ::: compatibility with the most popular cutting programs (ISO data output, ESSI etc) (optional)
- ::: automatic or manual trimming of the sheets

CONTROL CONSOLE

A mobile, practical and light console contains the CNC for the graphical display of the work surface, of the cutting paths and of its parameters that can be eventually modified even during the processing. The dynamic zoom enlarges the surface portion, always identifying the actual position of the torch: this facilitates the operator in the management of cutting plans and machine edges.



Recirculating ball screw

HIGH PRECISION

High precision X and Y axes positioning, by means of rectified oblique teeth racks, pinions and double prismatic runners for precompressed ball sliding blocks.



Rack and Pinion

WIDE RANGE OF ACCESSORIES ON DEMAND

Thanks to the racks and pinions specific for high speed and precision, to the engines performances and to the electronic management for use in extreme conditions, the Steel Max model can be provided with complementary tools to plasma such as the drilling and tapping head, the oxy-fuel torch, the parallel plasma torch, keeping a high speed of movement.



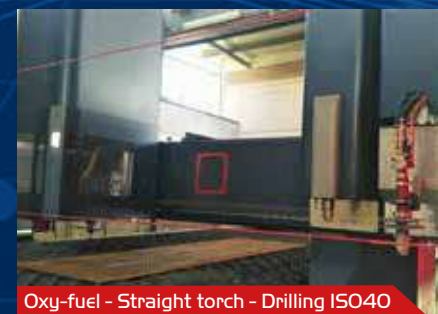
Bevel - Drilling Unit HT160



Bevel - Pipe cutting



Straight torch



Oxy-fuel - Straight torch - Drilling ISO40



Drilling ISO40



Bevel - Drilling Unit HT200

PIPE CUTTING

Thanks to its strong structure, the Steel Max model can easily support the lateral extension of the crossbeam. The cutting table, with adjustable height, facilitate the processing of beams and tubes with square or rectangular section. The rotary tool with spindle is used for round tubes. This solution facilitates the loading of beams and tubes and provides the possibility to use the same tools installed for the sheet cutting.



Steel Max: Bevel - Drilling ISO40 - Pipe cutting 12mt



Bevel - HEB Beam cutting

BEVEL HEAD WITH UNLIMITED ROTATION

- Inclination up to +/- 45-
- Automatic adjustment of the tilt angle.



Bevel Head

SIX TOOLS DRILLING AND TAPPING HEAD WITH AUTOMATIC TOOL CHANGE

The drilling and threading unit installed on the Steel Max model allows to perform several operations such as drilling, threading, countersink, this one is available in two versions:

HT160 with drill max. 24mm Ø and thread max. M20 - HT200 with drill max. 30mm Ø and thread max. M24



HT160



HT200

ELECTROSPINDLE FOR DRILLING / TAPPING ISO 40



Drilling ISO40

- Drilling with diameters from 4 to 32 mm
- Tapping M4 to M24
- Automatic countersinking on hole with subsequent cycle
- Automatic descent adjustment with sheet contact
- Possibility of adding automatic and motorized 6-position external tool magazine



Tool magazine

OXY-FUEL

With the addition of the oxy-fuel torch it is possible to cut steel with a thickness greater than that permitted by plasma technology, preserving the qualities of precision and speed. Using a unique structure, Numeric Control and Software, it's possible to combine two complementary technologies in a single machinery.



Oxy-fuel