

esa



CNC S 500

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Machine configurations available

- Bridge with gantry axis
- 2 autonomous Plasma Torch (second is optional)
- Autogas Console with digital communication
- Up to 12 oxycut torches with both automatic or manual handling
- Automatic oxycut torch packing cycle (optional)
- Gas proportional valves handling for Oxycut.
- Combined machines Plasma Oxycut Drilling head
- Bevel cutting using high performance RTCP
- Pipe cutting
- Up to 32 exhaust fan
- Mobile exhaust fan, in electrical gearing with the gantry
- Pneumatic drilling head
- Pneumatic marker
- Arc Writer
- Spindle unit for both drilling and tapping
- Automatic tool change

Main functions

- Windows® like user interface
- Integrated dynamic control of the torch height, able to react to surface unevenness (THC).
- Metal plate anti-collision system.
- In-process adjustment of cutting height controlled by the operator.
- Rectangular nesting on machine with parametric library.
- Retrace and Repos functions and cutting restart with off-workpiece, tangential or linear lead-in insertion
- Autolearning of plate origin and rotation, and up to 20 machine origins.
- Work starting line search (Block Search) with graphic collimation of the restarting point.
- Automatic restart of the cutting line after a blackout interruption.
- Automatic recover of an arc loss.
- Manual cut (even in bevel).
- High speed dryrun function for cutting area verification
- Technological parameters Database classified for material and thickness.
- Automatic gas console with digital bus connection to the generator
- Cutting layout displayed with dynamic graphic of torch path.
- Full screen Dynamic piece graphic display,
- Probing method for acquiring the metal plate thickness: via electric signal (ohmic contact) or digital input.
- Laser pointer for origin acquisition.
- Direct access to the main machine state.
- ISO program executor generated by main CAD/CAM functions.
- DXF file import, complex parametric shapes library with Shapecam software on a off-line PC (optional)
- Boring and tapping cycles with automatic tool preset.
- Programs executed by means of network, Hard Disk, USB and Drip
- Feed mode.
- Monitoring of torch tip and consumables materials with customized alarm signals.
- Log file with automatic service monitoring.
- RTCP for controlling heads with 5 axes; cutting with blowpipe tilting at variable angles.

- PLC customizable by manufacturer, with IEC61131-3 language with functional block in IL or C
- Off-line programming on a standard PC, using a special simulation add-on
- Customizable Alarms Messages

General specifications

- 24Vdc 100W max power supply
- 15" TFT XGA colour display with antiglare screen
- Dedicated scratchproof, oil-proof IP65 keyboard with 102 keys
- Override regulation by electronic wheel mounted on the panel
- Silicon hard disk (flash disk), USB port

Technology

- CPU Atom N270 1,64 Ghz, 1 Gb of Ram

Communication ports

- 2 serial ports RS-232, 2 USB port for memory stick
- 1 Ethernet port
- 2 Can Open port
- Fiber optic interface
- Local area network

User memory

- Silicon hard disk (flash disk) 256 Mb expandible via USB
- 8 Mb flash memory

Options

- Touch Screen
- Modem for teleservice
- Autogas Console communication
- RTCP function for 5-axes bevel cutting

Axes

- Standard 4, on request up to 12
- 5V incremental encoder inputs line-driver or single ended
- Encoder fault diagnosis; maximum encoder input frequency 500KHz

Inputs/Outputs

- Standard 32 inputs and 32 outputs
- Remote I/O system, connected through optic fiber link
- The I/O number could be expanded up to 2048
- 24Vdc PNP opto-insulated inputs, 24Vdc 1A opto-insulated static outputs protected against short circuit
- 4 Fast Digital inputs
- 4 Analogical inputs (0-10 V 12 bits resolution)
- 1 Analogical outputs (0-10V 12 bits resolution)



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