S 510

CNC 510 serie

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Combines powerful graphics with the solid structure of embedded products, making Plasma and Oxyacetylene cutting machines both tough and versatile. It speeds up the programming and operating times of the cutting process. The Retrace and Repos functions have been specially researched to suit the requirements of these machines. They allow particularly complex nesting layouts to be carried out, dealing with all the exceptions and optimizing the production times to the utmost.

Machine configurations available

- Bridge with gantry axis
- 2 autonomous Plasma Torch (second is optional)
- Up to 8 oxyacut torches with both automatic or manual handling
- Automatic oxycut torch packing cycle (optional)
- Gas proporzional valves handling for Oxycut.
- Pipe cutting
- Up to 16 exhaust fan
- Mobile exhaust fan, in electrical gearing with the gantry
- Pneumatic drilling head
- Pneumatic marker
- Arc Writer

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.
- Manul cut.
- High speed dryrun function for cutting area verification
- Technological parameters Database classified for material and thickness.
- 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 acces to the main machine state.
- ISO program executor generated by main CAD/CAM functions.
- Programs executed by means of, Hard Disk (Flash), USB and Drip Feed mode.
- Monitoring of torch tip and consumables materials with customized alarm signals.
- Log file with automatic service monitoring.
- PLC customisable by manifacturer, with IEC61131-3 language with functional block in IL or C
- Off-line programming on a standard PC, using a special simulation add-on
- Customisable Alarms Messages

General specifications

- 24Vdc 150W max power supply
- 12" TFT SVGA colour display with antiglare screen
- Dedicated scratchproof, oil-proof IP65 keyboard with 85 keys, 18 Softkey, 5 status keys and 4 command keys
- Override regulation by electronic wheel mounted on the panel
- Silicon hard disk (flash disk), USB port

Technology

- CPU ATOM 500 MHz, 256Mb of RAM. FPGA integrated logics, surface mounting, fiber optic
- Communication ports
- 2 serial ports RS-232, 1 USB port for memory stick
- 1 Can Open port
- User memory
- Silicon hard disk (flash disk) f256 Mb (expandile via USB)

Options

- Modem for teleservice
- Autogas Console communication

Axes

- Standard 4, on request up to 8
- 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
- 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
- 2 Analogical inputs (0-10 V 12 bits resolution)
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