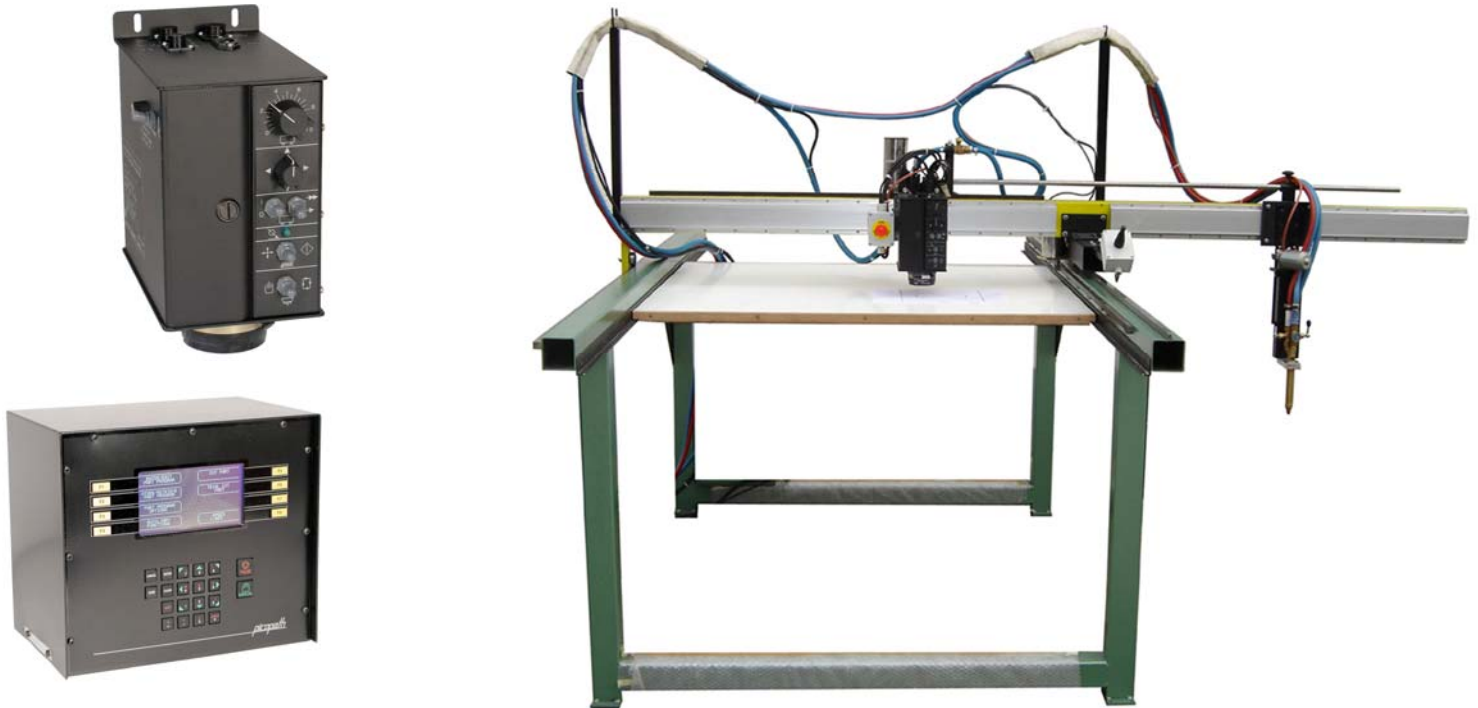


COORDINATE CUTTING MACHINE KOR 2x1 – HL90



Coordinate cutting machine KOR2X1 is used in small and medium sized companies in metal processing industry for singly and low mass series production.

Maximum width of parallel cut is 1000 (1500) mm. Length of cutting depends on length of rail.

Cutting is done with one torch, which is leaded by sketch with help of optical head.

Desired shape form must be drawn on white paper with ink or HB pencil. Minimum line thickness is 0,6 mm. Cutting ratio is 1:1.

Table for drawing can be moved in longitudinal direction.

Gas flow is regulating with manual valve.

Coordinate cutting machine KOR2X1-HL90 with air plasma is particularly proper for cutting stainless steel sheet and other high quality metals, aluminium, cooper, titanium and their alloys.

Technical characteristics:

- Length: 2000 m (option 4 or 6 m)
- Width: 1000 mm
- Dimensions of cutting: 1000*2000 mm
- Largeness of drawing: 1000*1000 mm
- Number of torches: 1
- Setting the height of torch: manual with slide (option with electromotor)
- Cutting procedure: flame cutting (acetylene, propane-butane), plasma
- Temperature operating: 0°C to + 50°C
- Power supply: 220V, 115VA

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Welding automation

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COORDINATE CUTTING MACHINE KOR 2x1 – HL90

HL-90 Track system

Following the future ...

HL-90 track system is complete moving system, perfect for small cutting machine. Compact trace unit contains track and operation control for driving. It assures movement of whole system for two-axes systems and cutting controls. HL-90 assures consistent movement of system for high quality cutting with advanced technology of processing signal in advance and patented trace – rotate device.

Features and benefits

- All operation controls on one panel.
- System support speeds up to 3m/min
- Dual speed range
- Enhanced cornering circuitry for improved low speed tracing
- CNC compatible – optional interface connection



Picopath CNC control



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Picopath CNC control

Picopath is the cost effective way to add CNC capabilities to your cutting system.

Easy to Use.....



The Picopath was designed so that a new operator can step up to the control and begin cutting parts immediately, with virtually no training and little need for the operators manual. It has a very simple keypad and a large, 16 line, backlit LCD graphic display. The control is menu driven so the operator can quickly and easily perform the desired function by pressing one of the eight soft keys corresponding to the available menu items. The Picopath also displays the shape library parts and graphically prompts for their parameters so these parts can be quickly cut without referring to a manual.

Advanced Contouring



Scroll program display, with edit capability.

Performance

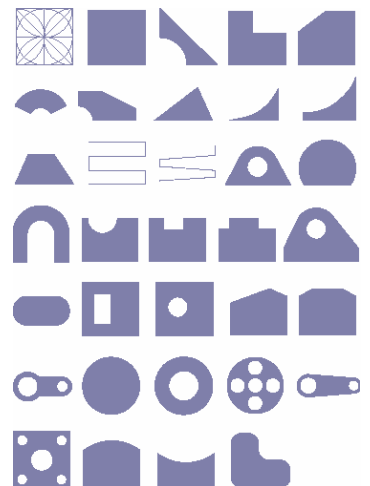
The Picopath utilizes true closed loop servo control with encoder feedback for both position and velocity control. This control loop is updated every millisecond to provide accurate, smooth contouring motion. The Picopath also has an advanced hardware and software design that makes it capable of virtually unlimited speed/resolution performance.

Full Featured Operation

The Picopath has all the capabilities of a modern cutting machine control as well as several productivity-increasing features found only in Picopath. Also, all these features come standard in the Picopath - there is nothing optional to be ordered.

Parametric Shape Library

Powerful library of 33 pre-programmed parametric shapes from which over two hundred different shapes can be created.
Graphic display of shape library parts and parametric prompts.
Chain-cut capability with programmable scrap clearance and common line cutting.



Picopath's pre-programmed library of shapes.

Manual Data Input (MDI)

Create and edit part programs using either EIA (RS-274D) or ESSI (ISO 6582) part programming languages.
Scrolling part program display.
Edit downloaded part program at the control.
Display comment text of downloaded programs for operator information.

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Picopath CNC control

Trace/Teach*

Converts optical tracings into EIA (RS-274D) or ESSI (ISO 6582) programs. Automatic part closure detection automatically stops the tracer at the end of the template.

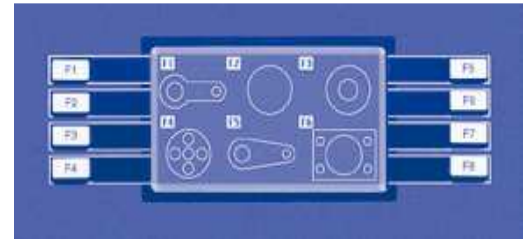
Allows multiple pierce points, lead-ins, lead-outs and rapid traverse segments for multiple cut pieces in one program.

Trace at slow speed for best part accuracy and cut (with acceleration and deceleration) at optimum speed for your process.

Upload taught part to CAD system, remote host computer or other storage device.

Digitally calculated kerf compensation extends kerf range of tracing system.

* Requires separate optional tracer control system which can be supplied if required



Access the 33 shape parametric shape library via Picopath's 16 line LCD screen.



Select the desired dimensions to customize parametric shapes before cutting.

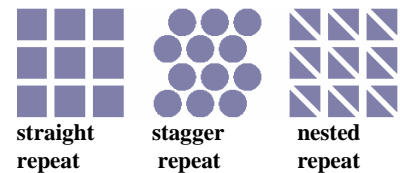
CAD Download

Download part programs via built-in serial port using RS-232 or RS-422 link.

Accepts EIA (RS-274D) or ESSI (ISO 6582) part programs.

Auto-reload feature allows downloading unlimited length programs.

Dialog mode allows machine operator to review and select programs for download.



straight repeat

stagger repeat

nested repeat

Programming Options

English and Metric operation for worldwide use.

Kerf compensation with programmable kerf value.

Automatic corner alignment automatically positions part in desired corner of the plate with the specified scrap clearance.

Mirror part in both X and Y axis.

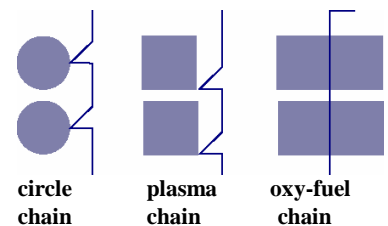
Rotate part with 0.01 degree resolution.

Scale part from 0.000001 to 99.999999 times original size.

Repeat shape with three grid patterns (straight, stagger and nested) for automatic cutting of

multiple pieces.

Battery-backed memory for storage of up to 64 part programs using sophisticated workfile part manager.



circle chain

plasma chain

oxy-fuel chain

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Picopath CNC control

Performance Features

Digital servo positioning control for any cutting machine.
Programmable cut speeds.
Continuous path speed ensures highest cut quality.
Automatic corner slowdown for clean, sharp corners.
Increase/decrease speed on-the-fly as required for best cut quality.
Automatic plate alignment corrects for skewed plates.
On-path backup with off-path re-pierce and return-to-path functions for easy, accurate cut-loss recovery.
Machine homing to limit switch and encoder marker for calibration.
Rip mode for straight line cutting.
Jog controlled cutting.
Punch or powder marker capability.
Manual jog control with position read-out.

Installation and Setup Features

Selectable axis control orientation for compatibility with all cutting machines.
Complete oxy-fuel interface with programmable preheat, ignition and creep time.
Complete plasma interface with programmable purge and ignition time and arc-transferred feedback.
Motorized torch lifter control.
Programmable servo gains, machine parameters, speeds and communication parameters for flexible application.
Interfaces to most optical tracing systems for integrated control.
Complete built-in diagnostics for check-out and test.



Specifications

240 x 128 pixel, 16 line x 40 column backlit liquid crystal display.
Industrial grade conductive rubber keypad with tactile feedback.
256K bytes of battery backed-up part program memory.
Non-volatile storage of all setup data.
Universal AC input (85-135 or 180-250V AC at 47-63 Hz).
Optically isolated $\pm 10V$ drive outputs and incremental encoder inputs.
10 dedicated plus 2 general purpose 24V/1A DC outputs and 10 dedicated plus 2 general purpose 24V DC inputs for gas/plasma control.
Optically isolated RS-232C/422 port operates up to 19.2K baud.
Dimensions: height 10.5" (267mm); width 12" (305mm); depth 8" (203mm).
Weight: 17 lbs. (7.7 kg).
Operating environment: 0 to 50C (32 to 122F); 95% relative humidity (non-condensing).

The Picopath has full featured I/O for flexibility and ease of installation

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TORCH S160



EXTERNAL NOZZLE

Code	Description	Thickness of cutting	Gas
IA0RREK000A1	External nozzleA1	3-100 mm	acetylene
IA0RREK000A2	External nozzleA2	100-300 mm	acetylene
IA0RREK000P1	External nozzleP1	3-100 mm	propan
IA0RREK000P2	External nozzleP2	100-200 mm	propan
IA0RREK000E1	External nozzleE1	3-100 mm	natural gas
IA0RREK000E2	External nozzleE2	100-300 mm	natural gas

CUTTING NOZZLE

Code	Description	Thickness of cutting	Cutting
IA0RREK000K1	Cutting nozzle K1	5-15 mm	manual+mehanical
IA0RREK000K2	Cutting nozzle K2	15-30 mm	manual+mehanical
IA0RREK000K3	Cutting nozzle K3	30-60 mm	manual+mehanical
IA0RREK000K4	Cutting nozzle K4	60-100 mm	manual+mehanical
IA0RREK000K5	Cutting nozzle K5	100-200 mm	manual+mehanical
IA0RREK00SK1	Cutting nozzle SK1	5-15 mm	mehanical
IA0RREK00SK2	Cutting nozzle SK2	15-30 mm	mehanical
IA0RREK00SK3	Cutting nozzle SK3	30-60 mm	mehanical
IA0RREK00SK4	Cutting nozzle SK4	60-100 mm	mehanical
IA0RREK00SK5	Cutting nozzle SK5	100-200 mm	mehanical



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