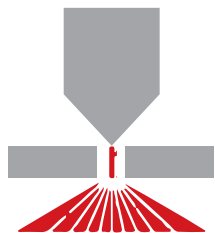


563-391-7700



EC220P

**CNC PLASMA
CUTTING SYSTEMS**

ERCOLINA EC220P-CNC TUBE, PIPE &

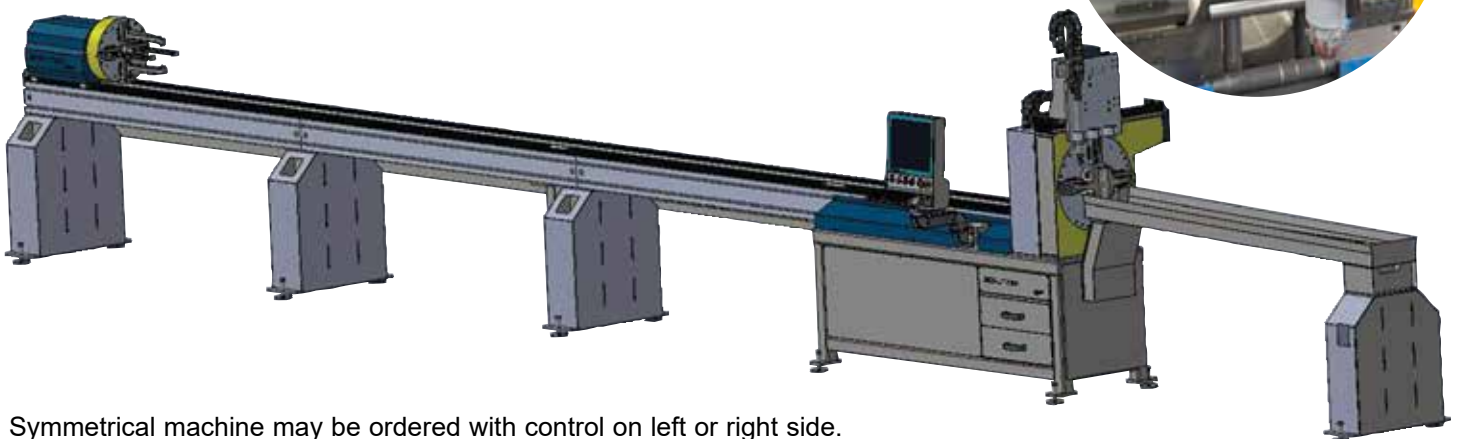
High Precision when Cutting Edges

OVERVIEW

Ercolina's Plasma CNC Tube, Pipe and Profile Cutting System Model EC220P-CNC performs two-dimensional cuts of any shape quickly and productively on conductive metal tubes, such as aluminum, steel, copper, brass or others.

Ideal for cut off, slotting, saddle cuts, hole patterns, tube notching and more. Quickly produce quality consistent cuts while reducing labor cost, improving job turnaround time and eliminating secondary fabricating operations.

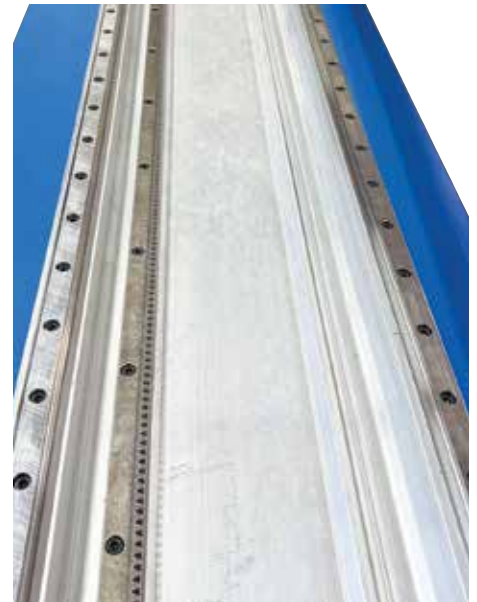
The operator interface is easy to learn and very user-friendly. Torch spindle is connected to cutting head increasing the amount of usable cutting area on material. All axis movements are controlled with servo drives for greater accuracy. Operator friendly control interface with easy to learn software allows operator to create desired cut and analyze torch path to minimize scrap before cutting.



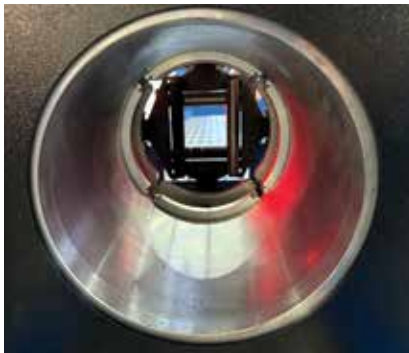
Symmetrical machine may be ordered with control on left or right side.

PROFILE PLASMA CUTTING SYSTEM

Included software allows import of standard IGES and DXF CAD files that are supported by most CAD software; such as Solidworks, Tekla, SDS2, Auto CAD, and Pro/Engineer, for faster setup. Touch screen control allows operator to move all axes, control speed and start or stop the job when needed. Screen displays current G-Code allowing operator to monitor program. Emergency stop conveniently located for operator safety.



Rack and Pinion with hardened steelways



Large through-spindle capacity



Innovative recessed front gate allowing carriage to position last cut of only 6"

FEATURES

- Intuitive software provided is the market leader quickly and accurately produces cuts, holes, designs.
- Front chuck accepts rounds to 8-5/8" without modification.
- Self-centering chucks keep material on center, capturing square, rectangular, angle and C Channel with no modifications required to 6-5/8 inch.
- Feed system seamlessly processes pipe with full eight-inch pipe pass through with included gate roll.
- Automatic material supports on each table support interpolated with front gate moving automatically to correct height of programmed part for easy material leveling.
- Auto bevel 45° left and right.
- Manual chucks front and back.
- X1 (back/forth movement of carriage) precision thanks to low backlash helical rack and pinion.
- B1 and B2
 - Low backlash planetary gearboxes for accurate rotation of rear carriage and front gate.
 - Rotation drive via high precision brushless motors with integrated absolute encoders, high precision/low maintenance belts and cogs.
 - Rotation bearings conducted to ground with carbon brushes, increasing bearing life by eliminating current arcs on bearings.
- All working devices shielded to ip65 specs, exceeding most stringent NEMA standards... <https://www.nemaenclosures.com/blog/ingress-protection-ratings/>

OPTIONAL

- Drilling, threading functions, automatic loading table.

ADVANTAGES

- Industrial design with greater support for heavy wall tubes and profiles by quality manufacturer exceeds competing products.
- Brushless servo motors and rigid design increases capacity, reduces vibration during cutting and produces smoother cuts than competitive models.
- Superior over-design and build quality and componentry.
- 24.5 ft Standard length capacity.
- Modular design and table and front gate allow additional length while improving setup and shipping.
- One-piece extruded table bed for greater strength. 2,400mm sections connect quickly and easily with dowel pin and jackscrew.
- High quality steel linear self-cleaning guides on hardened ground precision steel rails on feed table.



- Extended grip tail stock reduces material waste to 6 inches.
- Finished cabinet protects electronics and plasma unit. Power component isolated from control circuit in separate cabinet to eliminate disturbances to control.
- Supplied standard with Hypertherm Powermax85 SYNC plasma cutter.
- Sync3 D software for design and importation of files.
- Quick attach lines for direct connections to plasma source.
- Cut, Mark with paint, Etch and laser pointer standard.
- Multi tool head for cutting, pen marking, and impact marking material. Optional anti-collision system not only protects torch, but sensors also work for height control necessary for cutting rusty/painted tubes.
- LED light for accurate alignment of cut area.



Machine operation center



Auto 5th axis bevelling head (available)

- Included front exit support table helps support longer workpieces.
- Industrial grade control at machine.
- Detail simulation allows operator to view all machine and torch movements before cutting.
- Industrial touch screen control handles all axis speed and movement in manual or automatic movement.
- Five Axis digital CNC control with angle and linear movement for beveling.
- Digital closed loop drives by Sanyo versus cheaper stepper motor.
- Sync3D CAD software for design layout, nesting programs and convert to machine G code programming automatically.



Part simulation

- Drive retains home position at all times.
- Synchronous material supports move with workpiece.
- Recessed with through spindle front gate allows minimum scrap.
- Imports most CAD files including STEP and IGES.
- Cuts steel, stainless, aluminum, galvanized, black pipe and chrome materials.
- Designed to easily accept exhaust air flow with accessory for cleaner work area.
- Limit safety switches are mechanical as inductive switches fail in harsh cutting environments.

Technical data ERCO CUT EC220P.

All information and data on cutting PLASMA TUBES

ERCO CUT EC220PHT 75M

Minimum profile length	12"
Maximum standard length	24.5'
Maximum weight of materials (Steel, Stainless Steel, Aluminum, Brass, Copper)	30 lb/ft
Round (min. – max.)	Ø 3/4" – 8-5/8"
Square (max.)	6"
Rectangular (max.)	8" x 2"
Angle (max.)	6"
C-Channel (max.)	8" – 2"
Flat bar dimensions	8"
Flat bar thickness	1"*
Auto bevel 45° left and right	
Maximum linear speed of X, Y, Z axes	196 ft/min
Maximum spindle speed	100 rpm
Controlled axes	8
Machine weight	2646 lbs
Numerical control	Sync 3D

* Depending on the power of the plasma
Hypertherm Powermax85 Standard



EC220P CNC Plasma
Cutter Videos



Front View



Rear View

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