



RETRO SYSTEMS
Cutting Edge Technologies



Webpage



3D View



Sales Contacts



Request Quote

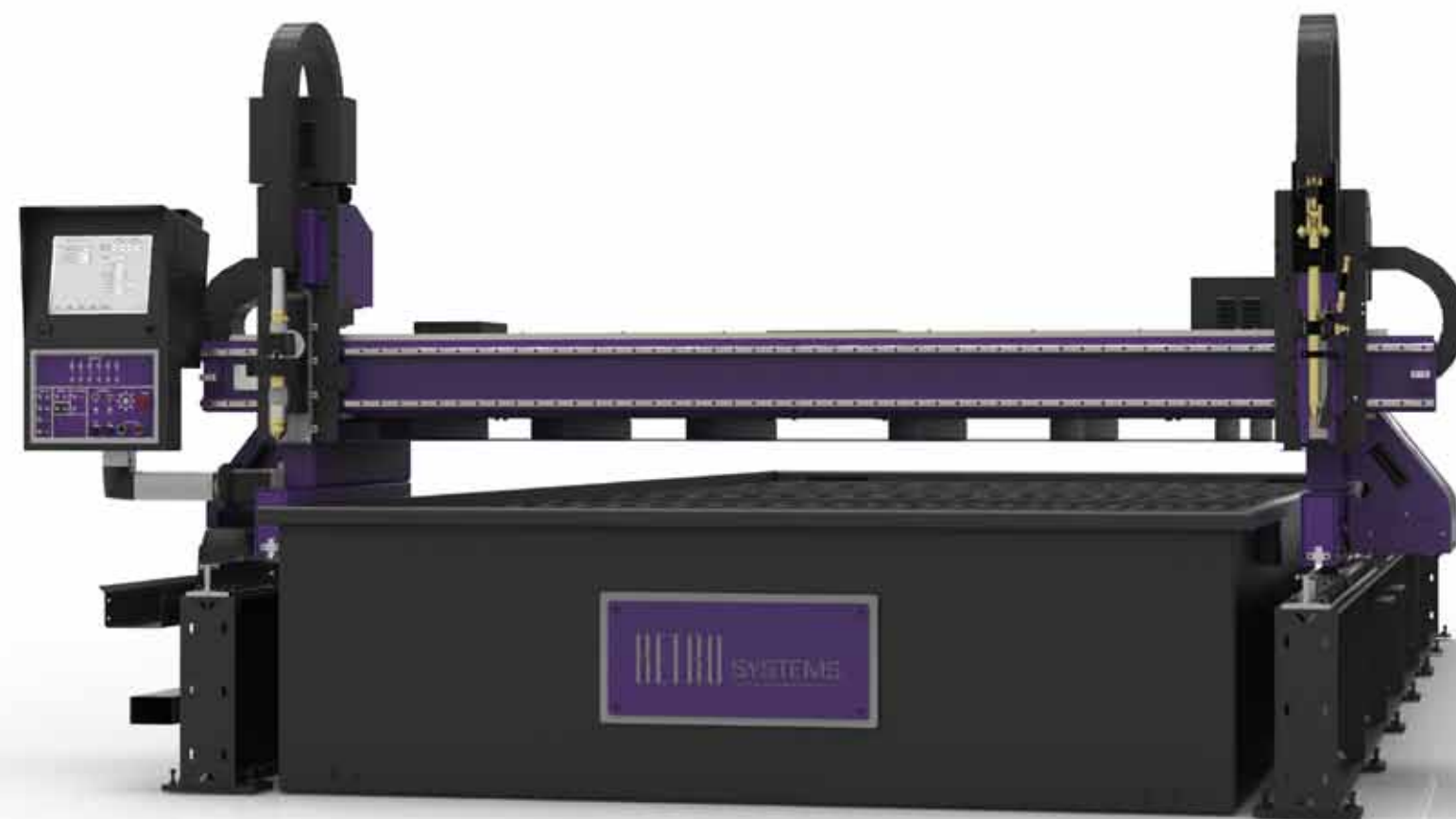
Retro Systems PO Box 500 430 W Clay St Valley Center, KS 67147

o +1-316-755-3683 f +1-316-755-1675

www.retrosystems.com



HORNETXD[®]



RETRO SYSTEMS
Cutting Edge Technologies

Strength + Motion = Performance

Strength

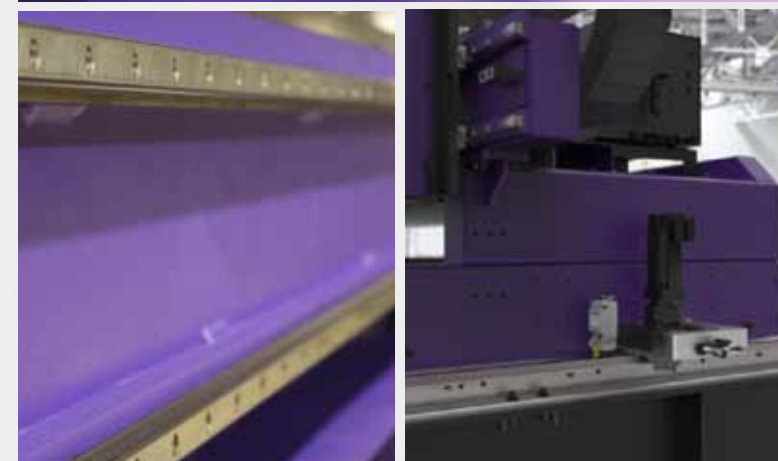
The HORNET XD is built for strength. Powerful 480V AC SERVO motors drive a stress-relieved, machined beam along structural I-beam mounted rails. The result is a machine with superior durability and reduced maintenance.

Motion

The HORNET XD provides superior motion control in its class. The drive system consists of AC SERVO motors, low-backlash planetary gearboxes, and helical rack and pinion. Dual linear ways on the cross-axis provide smooth and precise motion. Retro Systems' Z-axis lifters use precision ballscrews and magnetic seals for accuracy and durability.

Performance

Strength, precision motion control, and high-quality components make the HORNET XD the most durable robust cutting system in its class. That is performance you and your company can depend on.



Retro Systems

American-Made



Retro Systems is proudly 100% American owned and American made. We design and manufacture the HORNET XD using state-of-the-art technology at our 47,000 square foot facility in Valley Center, KS, USA. Training courses and demonstrations are offered at our adjacent 7,000 square foot facility.

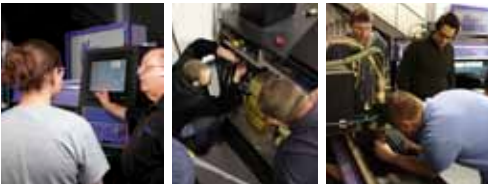
Engineering



Retro Systems’ engineering team is the innovation life-blood of the company. We constantly strive to provide customers with high-quality, durable, and user-friendly machines. At Retro Systems we develop and test new designs, concepts, and processes to provide our customers with products that stay ahead of the curve.

Training

Courses



Retro Systems offers free hands-on instruction and demonstrations for all of our customers. By offering a high level of hands-on CNC training and instruction, Retro Systems stands apart from the competition. Attendees of our courses come away confident in their ability to safely and efficiently operate our machines.

Training Center



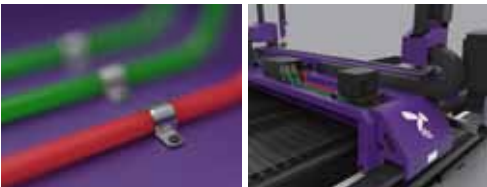
Our training courses are held at our high-tech 7,000 sq. ft. training center which includes offices, a classroom and a 4,500 sq. ft. lab equipped with CNC cutting equipment for demonstrations. The lab area includes multiple CNC cutting machines configured with high definition plasma and oxy-fuel cutting equipment as well as plate beveling and pipe cutting systems. The facility is also used to host customers who visit the factory to review our products.

Durability

Heavy-Duty Construction

The HORNET XD is constructed from heavy-duty steel. The tongue and groove rails are supported by structural “I” beams, and the gantry is custom machined.

Protected Cables



Electrical cables and gas hoses on the HORNET XD are protected by sheet metal covers and enclosed flexible cable carriers. Exposed cables are organized by metal tie downs.

Service



Retro Systems understands that whenever your cutting machine is down it is costing you money. With each machine, we offer on-site installation, six months labor, and 24 months for replacement parts.

Cutting Stations

Expandability

The HORNET XD can be configured with one master carriage and expanded to have up to three slave carriages. Each slave carriage can carry either a plasma or oxy-fuel torch. The HORNET XD carriages can be configured with a maximum of two plasma systems and a maximum of four oxy-fuel torches.

Marking



The HORNET XD has the ability to mark with plasma or air scribe. Hypertherm’s ArcWriter is a dual gas, variable output power, plasma marking, scoring, and punching system designed to leave temporary or permanent identification marks on metal surfaces. Meanwhile, The air scribe marker uses a vibrating tungsten carbide tip point mounted to a pneumatic ram to mark the metal.

Accuracy

Motion Control



Powerful dual-side SERVO motors combined with low backlash planetary gear boxes and helical rack and pinion drives move the gantry of the HORNET XD along the X and Y axes at speeds up to 1,000 IPM (25.4m/min).

AC Servo Drive

Our AC servo drives use a SERCOS fiber optic interface system to ensure optimum control and precision.

Ease of Use

Operator Stations



The HORNET XD comes standard with a rotatable attached operator station. The HORNET XD is also available with a remote pedestal operator station. Each operator station includes a 15” LCD touch-screen monitor, industrial keyboards, mouse, and E-Stop button. If needed, the operator station also includes an oxy-fuel operator control panel and a dust collector Start/Stop button.

Hypertherm CNC Control

The HORNET XD utilizes Hypertherm’s Phoenix motion control software on a Windows-based platform.

Remote Help



Remote help allows operators to connect to Retro Systems’ technical support via the internet in less than a minute from the convenience of the operator station. With the remote help feature Retro Systems technicians can virtually review settings, review setups, review part programs, perform software updates, perform HPRXD diagnostics, provide technical training, and observe CNC screens while running the machine.



Oxy-Fuel Cutting

The HORNET XD is capable of carrying up to four oxy-fuel cutting torches for cutting up to 4" (100mm) steel.

Oxy-Fuel Cut Charts

The Hypertherm CNC control on the HORNET XD includes oxy-fuel cut chart support that is specific to the type of oxy-fuel torch, material type, and thickness. The gas pressures and timing sequences in the cut charts control the electronic pressure transducers and solenoid valves. The operator selects torch type, material type, fuel gas, and material thickness from the Process Selection drop down fields.

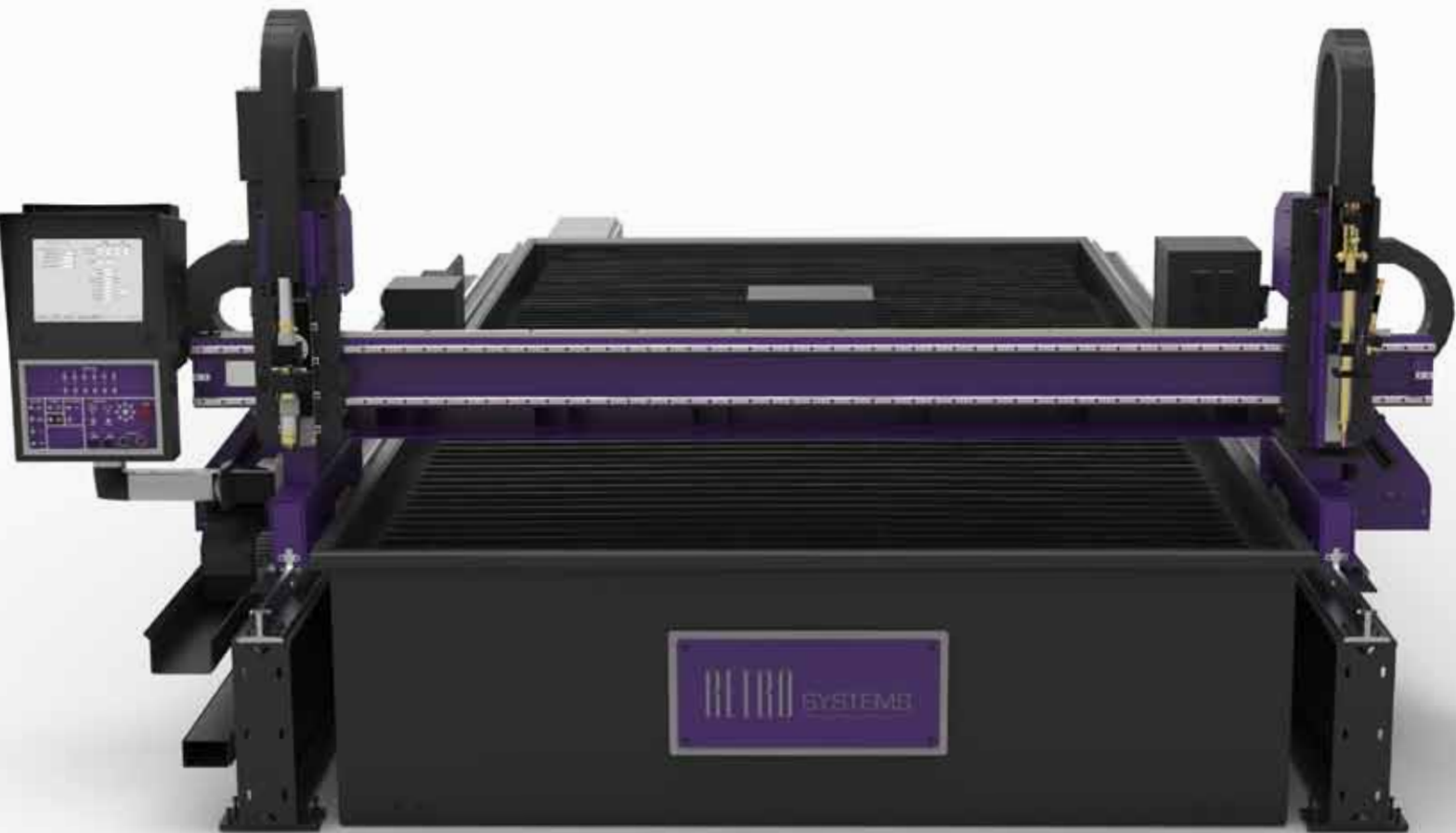


Electronic Gas Manifold

The Retro Systems Electronic Gas Manifold is designed for the most demanding oxy-fuel cutting applications. The package delivers rapid pierce times, excellent cut face surface, reduced spatter during piercing, elimination of top edge rounding, and optimal cutting speeds.

Oxy-Fuel Lifter

The Retro Systems motorized oxy-fuel lifter station with heavy-duty AC motor and lead screw drive is designed for heavy-duty production cutting.



Plasma Cutting

Hypertherm Full Suite

The HORNET XD is configured with the Hypertherm Full Suite of products including Hypertherm plasma systems (up to 400A), Hypertherm MicroEDGE Pro CNC control, and Hypertherm plasma height control technology. Use of the Full Suite ensures delivery of the latest Hypertherm technology, most reliable integration of system components, most consistent plasma performance, and the best system diagnostics.

Contour Bevel Systems

Retro Systems' Contour Bevel System creates 360° contour plasma bevel cuts up to ± 45 degrees. Retro Systems' design can produce any part design without unwinding the leads. With the Contour Bevel System manufacturers can make A, V, Y, K, X and gradual bevel cuts. Cuts can be made up to 45 degrees on rotational axes.



Plasma Lifter

The Retro Systems plasma torch lifter and Hypertherm SENSOR torch height control software are tightly integrated to deliver a full featured precision system delivering positioning speeds of 500 IPM (12.7m/min).

Tables

All Retro Systems cutting tables are fabricated from heavy-duty steel and built to last.

AeroCLEAN

Retro Systems AeroCLEAN zoned downdraft cutting tables are configured with industrial-grade fume extraction systems. Zoned-downdraft tables are the most effective method of capturing thermal cutting emissions and maintaining a clean and safe work environment.



HydroCLEAN

A more economical option than the AeroCLEAN is Retro Systems HydroCLEAN water tables. The HydrpCLEAN still reduces the amount of smoke generated from oxy-fuel and plasma cutting arcs.

Machine Specifications

Nominal Cutting Width (A) *
Width Between Rails (B)
Overall Machine Width (C) **

Nominal Cutting Length (D)
Overall Machine Length (E)
Overall Machine Height (F)
Distance from Floor to Heat Shield
Gantry Parking Space
Suggested Cutting Table Slat Height
Positioning accuracy ***
Repeatability ***
Maximum Traverse Speed
Maximum Number of Stations
Maximum Number of Plasma Stations
Maximum Plasma Production Capacity
Recommended Oxygen Plasma Systems
Recommended High Definition Plasma Systems
Maximum Number of Oxy-Fuel Stations
Maximum Oxy-Fuel Production Capacity
Machine Input Power

Input power – Plasma System

* The number of stations on the gantry beam affects the achievable cutting width. The nominal cutting widths listed are applicable for 3 stations (not including a contour bevel system).

** Subtract 17" for machines with a Pedestal Mounted CNC Controller. Pedestal is 46" x 40".

*** Measured in a 60" x 60" area (1.5 m x 1.5 m)

Specifications are subject to change

Options

Operators Station

Remote Pedestal

Plasma

Plasma Systems up to 400 Amps (2 max)
Manual Bevel Attachment or Contour Bevel System
Arc Shield
Air Dryer
Air Pressure Booster

Oxy-Fuel

Torch Height Control
Electronic High/Low Preheat
Auto Ignition
Bevel Attachment

Stations

Air Scribe
Electro-Pneumatic Drill
Arc Writer

Tables

AeroCLEAN Multi-Zoned Down Draft Table
HydroCLEAN Water Table w/ Adjustable Water Level
Dust Collection Systems

Software

Hypertherm CAM

HVAC

Drive Refrigeration
Vortex Cooler

Miscellaneous

Servo Driven Slave Carriage
Cross-Hair Laser Pointer
Alignment Camera
Remote Control

5 ft (1.5 m)	6.5 ft (2 m)	8.1 ft (2.5 m)	10 ft (3 m)
60" (1.5 m)	78" (2 m)	98" (2.5 m)	120" (3.0 m)
71" (1.8 m)	89" (2.3 m)	109" (2.8 m)	131" (3.3 m)
127" (3.2 m)	144" (3.7 m)	165" (4.2 m)	187" (4. m)
144" (3.7 m) Minimum, Expandable in 48" (1.2 m) Increments			
Nominal Cutting Length +72" (0.9 m)			
88" (2.24 m)			
42" (1.07 m)			
84" (2.1 m)			
30" (0.76 m)			
+/- 0.005" (0.127 mm)*			
+/- 0.001" (0.025 mm)*			
1200 ipm (30.6 mpm)			
6			
2			
2" (51 mm)			
Hypertherm HSD130, MAXPRO200			
Hypertherm HPR130XD, HPR260XD, HPR400XD			
6			
8" (200 mm) with 30" (760 mm) slat height, 12" (300 mm) with lower slats			
480VAC, 50/60 Hz, 3-Phase Balanced-Y			
Refer to Plasma Manufacturer's Manual			

