Precision CNC Profile Cutting Innovation
**MINI HORNET HD**
The MINI HORNET HD delivers precision CNC profile production plasma cutting up to 1” (25mm) and oxy/fuel cutting up to 2” (50mm) on 5 ft (1.5m) wide plate in lengths of 10 ft (3.0m) or 20 ft (6.0m). Powerful (4) axis AC Servo drives, the easy-to-use Hypertherm MicroEDGE™ CNC control, Premium components and Rigid steel construction ensure consistent highly accurate profile cut parts with conventional or high definition plasma systems. Excellent quality small diameter holes are possible with the Hypertherm® HyPerformance™ HPR130XD high definition system.

**PLASMA & OXY-FUEL CUTTING, PLATE MARKING & AUTO PROCESS CONTROL**
The MINI HORNET HD may be configured with (2) cutting processes – (1) conventional or high definition plasma cutting and (1) oxyfuel cutting station. Hypertherm Powermax™ systems are an excellent choice when conventional plasma is required. Air plasma systems are an excellent choice for medium duty conventional plasma cutting. For extended consumable life, improved cut edge weldability and heavier plate capacities, we recommend higher amperage oxygen plasma systems with liquid cooled torches. If premium plasma cutting is required, a high definition plasma system is the best choice.

**INTEGRATED CUTTING TABLE**
The MINI HORNET HD standard cutting table is an integrated single zone down draft air table. Customers may upgrade to the optional multi-zoned air table design to reduce the fan size required and improve exhaust efficiency. Multi zone tables direct exhaust air flow only through the zone where the torch is cutting. The CNC control signals the opening and closing of appropriate damper doors based on machine position along the rails. Removable heavy steel cover plates protects moving parts from slag and heat. An exhaust flange is provided at the rear of the air table for connection to a cartridge style dust collector or fan. Retro Systems offers a wide range of dust collection equipment from Micro Air. The MINI HORNET HD cutting table is also offered in a water table design with adjustable water level.

**HEAVY DUTY BEAM AND FRAME DESIGN**
Rounded steel box beam and Dual Linear Ways ensure ultra smooth motion of the cross axis tool carriage. The machine frame end trucks on Triple Mached steel rails attached to support brackets on the sides of the integrated steel cutting table frame.

**POWERFUL (4) AXIS AC SERVO DRIVE SYSTEM**
Machine motion is powered by (4) 600 watt (1.8 hp) AC servo motors directly coupled to precision planetary gearboxes to deliver 1,000 IPM (25m/min) Rapid Traverse speeds. The optional plasma lifter with 60” (250mm) stroke is driven by an AC servo motor to deliver vertical positioning speed of 600 IPM (15m/min).

**HYPERTHERM® FULL SUITE**
The MINI HORNET HD is configured with the Hypertherm FULL SUITE of products including Hypertherm plasma systems, a Hypertherm MicroEDGE™ CNC control and Hypertherm plasma height-control technology. Use of the FULL SUITE ensures delivery of the latest Hypertherm technology, the most reliable integration of system components, the best and most consistent plasma performance and the best system diagnostics. Retro Systems machines configured with a Hypertherm HPR-40 Auto Gas plasma system and MTC ProNest programming software deliver True Hole™ cutting technology for mild steel.

**BUILT-IN EXPERTISE CONSOLE**
Eliminate operator variability by embedding Hypertherm’s cutting techniques into the part program with MTC ProNest offline programming software. The operator does not need to set: amperage, gas combinations or flows, torch pierce height, pierce time, pierce delay, cut height, arc voltage, interior or exterior profile feed rates or kert compensation. ProNest automatically sets all the previously listed parameters as well as tool type, location and speeds, torch height control settings and collision avoidance. Everything necessary to produce premium results every time is in the code. The Hypertherm FULL SUITE is the only way to go.

**FAST & EASY INSTALLATION**
Uniblock design means set up is complete in just a few hours. A few components are bolted on, a few cables connected and you’re ready to start cutting parts.

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**PRECISION CUT PARTS**
- Precision Gauge
- High Speed Heavy Plate Cutting
- Weldable Cut Edges
- Plasma Plate Marking

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**MINI HORNET HD STANDARD FEATURES:**
- Cutting Width: 66” (1.7m)
- All Steel Construction
- Fabricated 1/4” Steel Table Frame
- RV Style Beam
- Integrated Cutting Table
- Single Zone Air Table with Sit/Stand Center Exhaust Tube
- Slot combs with slots cut on both sides – Slots included
- Exhaust Connection on Rear of Table
- Hypertherm® Automation PhoenixMC™ 4 Axis CNC Control
- 1,000 RPM Rapid Traverse Speed (30m/min)
- 600 Watt 1.4 HP AC Servo Motors and Drive Amplifiers
- Precision Planetary Gear Boxes
- Triple Mached "T" Rail on both sides of Man Rail Axus
- Dual Linear Ways on the Cross Axis Beam
- Flexible Cable Carriers on both 1.6” Axus
- Master Carriage to accept TP-02 Tools

**CNC CONTROL & OPERATOR CONTROL CONSOLE FEATURES:**
- Microsoft® Windows® XP® - Embedded Version
- Hypertherm® Automation Phoenix® Motion Control Software
- Intel® 2.5 GHz or greater, 512 Megabytes RAM
- 80.0 Gigabyte Hard Drive or greater
- PS2 Keyboard & Mouse Ports
- (3) Onboard R4A5 10/100 Base-T Ethernet port
- (3) USB 2.0 & (3) Serial Ports
- Mouse Side Gap location
- 68 Shapes Including Text
- 13” (330mm) LCD Touch Screen
- E-STOP button

**MINI HORNET HD OPTIONS:**
- Cutting Lengths: 10 ft (3.0m) or 20 ft (6.0m)
- SPECIAL Small footprint 4'x6' Machine
- Plasma Systems up to 130 Amps (1 max)
- Integrated 4th Axis SENSOR Torch Height Control Interface
- Plasma Torch Lifter with AC Servo
- Collett Mount for Plasma Torch
- Raker Ball Plate Rider for Plasma Torch
- Cross-Hair Laser Pointer
- Oxyfuel Torch & Lifter Stanchions (3 max)
- Air Turbine Plate Marker (1 max)
- Dust Collection Systems
- Programming Software

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**CUSTOM CUT CHART**
- Custom Cut Chart allows creating and saving specific processes (100 per material type)

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**CONSUMABLE SCREEN**
- Displays height and part number for the correct plasma consumables based on the selections made in the CUSTOM CUT CHART. It even tracks consumable parts life.
MACHINE SPECIFICATIONS*

Positioning accuracy: +/- .005" (.127mm)
Repeatability: +/- .001" (.025mm)
Effective cutting width: 64.6" (1,641mm) plasma cutting, 61" (1,549mm) oxy-fuel cutting
Effective cutting length: 127" (3,225mm)
Overall machine height: 64" (1,625mm)
Overall machine length: 192" (4,876mm) including CNC control
Overall machine width: 113" (2,870mm) including CNC control
Maximum contouring speed: 600 IPM (15m/min)
Maximum traverse speed: 1,000 IPM (25m/min)
Maximum cutting tools: (1) plasma and (1) oxy-fuel station on tool carriage
Maximum amperage (plasma system): 130 A
Recommended air plasma systems: Hypertherm Powermax series
Recommended oxygen plasma systems: Hypertherm HSD130
Recommended high definition plasma system: Hypertherm HPR130XD
Maximum plasma cutting capacity: 1" (25mm)
Maximum oxy-fuel cutting capacity: 2" (50mm)
Maximum table capacity (full sheet): 1-1/4" x 60" x 120" (32mm x 1.5m x 3.1m)
Input power for cutting machine: 115 VAC single phase, 20A dedicated circuit

*Specifications are subject to change

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