#### **Industrial CNC Plasma Cutting Systems**

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## **Diamond Cut** - Precision & Productivity

Designed for accurate & productive high precision cutting applications

- Unitized system: easy to move and small footprint
- Ideal for fabrication shops that require high quality
- cutting and increased productivity
- Innovative inverted rail system
- Exceptional accuracy and cut quality
- Many system options available









**FEATURES:** 





- Unitized system
- Table sizes: 5' x 10' up to 12' x 45'
- Custom table sizes and configurations available
- Zoned down draft or water table
- 6" x 8" heavy duty fully machined steel gantry
- Bosch linear ways on rails and gantry
- Bosch Rexroth A/C servo drive motors with Ethercat
- Helical Agma 10 rack and pinion gears
- Ultra precision helical planetary gearboxes

- Welded and machined over-sized end trucks
- Magnetic torch breakaway
- Hypertherm HyDefinition plasma cutters
- Hypertherm Edge Connect CNC controller with ProNest
- Windows-based, 19.5" touch screen monitor
- Machitech Automatic Torch Height Control
- Full part list and electrical schematics
- On-site installation and training included
- Free lifetime remote support

# **Diamond Cut -** Precision & Productivity

FEATURES	<ul> <li>Specially designed for high precision, high production cutting</li> <li>Heavy duty unitized system</li> <li>Dual drive technology</li> <li>Innovative inverted rail system to protect rails and rack &amp; pinions against dust and material impact</li> <li>Small footprint</li> </ul>
CONSTRUCTION	Fully welded / machined unitized
GANTRY	<ul> <li>6" x 8" steel, welded and machined</li> <li>Over-sized end-trucks, for maximum stability</li> <li>Clearance under gantry: 8.5"</li> <li>3/4" Agma 10 helical rack and pinion</li> <li>25mm Bosch linear ways, on machined surfaces</li> <li>Cables and hoses are protected by the structure and enclosed power track</li> <li>Heat shield under the gantry</li> </ul>
RAILS	<ul> <li>Highly accurate 3/4" Agma10 helical rack and pinions</li> <li>25mm Bosch linear ways on machined surfaces</li> <li>Rails are installed on the table (unitized design)</li> </ul>
TABLE SIZES	<ul> <li>5' x 10' up to 12' x 45</li> <li>Custom sizes and configurations available</li> </ul>
CNC	HyperthermEdge Connect: • Windows based • 2 USB port, network connection • Phoenix software • Shape library • Part Program Support (PPS), Remote Help, Auto gas support, DXF import, and shape nesting • 2 year warranty
SOFTWARE	Hypertherm Cam: • Pronest 2019
DRIVES	Digital AC Servo 1 KW / axis
GEARBOX	<3 arcminute Ultra Precision helical planetary
RACK & PINION	3/4″ face – Agma 10 Helical
MAX. STATIONS	2 Plasma , 3 Oxy-fuel
PLASMA OPTIONS	Hypertherm HPRXD, XPR170 or XPR300
HYPERTHERM TRUE HOLE ENABLED	Yes

### **SPECIFICATIONS:**

HYPERTHERM FULL SUITE	Yes - Optional
HEIGHT CONTROL	• Machitech THC
CUTTING SPEED	0 to 500 IPM, related to process and plasma power source
MAX. TRAVERSE SPEED	1800 IPM
REPEATABILITY	0.001″
POSITIONING ACCURACY	0.002"
TABLE TYPE	<ul> <li>Water table with raise/lower system</li> <li>Zoned downdraft with removable trays (drawers included for easy small part and slag removal)</li> </ul>
TABLE CAPACITY	4"

#### **OPTIONS AVAILABLE:**

AUTO SLAG REMOVAL SYSTEM	No
CAMERA	Yes
DOT PEEN MARKER	Yes
DRILL	Yes (see Diamond Cut HD specifications)
DRILL TOOL CHANGER	Yes (see Diamond Cut HD specifications)
DUST COLLECTION SYSTEM	Yes - different systems and options available
EXTRA HIGH CLEARACEN	Yes - custom
INK JET MARKER	Yes
OXY-FUEL BEVELING	Yes - Straight line bevel adaptor
PLASMA BEVELING	<ul><li> 5 axis contour beveller</li><li> Straight line bevel adaptor</li></ul>
PULL CORD	Yes
ROTARY PIPE/TUBE PROCESSING	• 10′ long • 20′ long
SCRIBER	Yes