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

Machine models and specifications are subject to change without notice.
# Diamond Cut - Precision & Productivity

## SPECIFICATIONS:

### FEATURES
- Specially designed for high precision, high production cutting
- Heavy duty unitized system
- Dual drive technology
- Innovative inverted rail system to protect rails and rack & pinions against dust and material impact
- Small footprint

### CONSTRUCTION
- Fully welded / machined unitized

### GANTRY
- 6” x 8” steel, welded and machined
- Over-sized end-trucks, for maximum stability
- Clearance under gantry: 8.5”
- 3/4” Agma 10 helical rack and pinion
- 25mm Bosch linear ways, on machined surfaces
- Cables and hoses are protected by the structure and enclosed power track
- Heat shield under the gantry

### RAILS
- Highly accurate 3/4” Agma10 helical rack and pinions
- 25mm Bosch linear ways on machined surfaces
- Rails are installed on the table (unitized design)

### TABLE SIZES
- 5’ x 10’ up to 12’ x 45
- Custom sizes and configurations available

### 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

### 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
- Water table with raise/lower system
- Zoned downdraft with removable trays (drawers included for easy small part and slag removal)

### 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 CLEARANCE: Yes - custom
- INK JET MARKER: Yes
- OXY-FUEL BEVELING: Yes - Straight line bevel adaptor
- PLASMA BEVELING:
  - 5 axis contour beveller
  - Straight line bevel adaptor
- PULL CORD: Yes
- ROTARY PIPE/TUBE PROCESSING:
  - 10’ long
  - 20’ long
- SCRIBER: Yes