WATERJETS

TECHNICAL SPECIFICATION SHEET

HYDRA

5-axis CNC waterjet for stone

HYDRA is a 5-axis CNC waterjet for stone.



5 axes	CNC	49.6 HP	4,000 × 2,000 mm
A ±60°	5-axis cutting	Intensifier pump (37 kW)	Tilting work table

The cutting head cuts bevels, miters, and straight and curved shapes on a 4,000 × 2,000 mm hydraulic tilting table. A 49.6 HP (37 kW) intensifier pump provides power, with automatic abrasive transfer and electronic dosing.

KEY FEATURES

- **Tilting 5-axis cutting head**
  Servo motors drive all five axes.
- **Automatic abrasive**
  The transfer unit feeds 80 or 120 mesh abrasive from a 425 kg tank at up to 4 kg/min, with an electronic dosage controller and a flashing light and buzzer warning.
- **Table and safety**
  Hydraulic tilting table with a net under the sheet to catch small cut parts; safety doors, automatic lubrication and cabinet air conditioning.
- **37 kW intensifier pump**
  49.6 HP, one intensifier at 20:1, with a proportional valve.
- **Measure and position**
  Point laser and cutting from a template, a slab thickness reader with mapping and a nozzle presetting device set each job to the real slab.

APPLICATIONS Countertops: sink and cook-top cut-outs, curves and inside corners; bevels and miters with the tilting 5-axis head; inlays, medallions and detailed shapes nested on the slab; book-matched and vein-matched pieces.

HYDRA · TECHNICAL DATA

5-AXIS CNC WATERJET FOR STONE

KEY SPECIFICATIONS	
Working area	3,800 × 2,200 mm; 250 mm thick
Strokes	X 3,785 · Y 2,200 · Z 275 mm
Rapid traverse	40 m/min X and Y
Pump	49.6 HP (37 kW)
Abrasive	425 kg transfer tank; up to 4 kg/min
Table	Hydraulic tilting; net under the sheet
Control	21-inch touchscreen, Windows 10 PC
Weight	~14,330 lb (6,500 kg)

DETAILS	
A-axis	±60°
Focusing tube	9.43 mm OD
Orifice	Up to 0.36 mm

MACHINE	
Interpolated axes	5 (X, Y, Z, A, C)
Work table	4,000 × 157 1/2 × 78 3/4 in (2,000 mm), hydraulic tilting
Max. working area	3,800 × 149 5/8 × 86 5/8 in (2,200 mm)
Max. working thickness	9 7/8 in (250 mm)
Head rotation	A ±60°
Rapid traverse	X 40 · Y 40 m/min, servo motors

MACHINE (CONT.)	
Control	21-inch touchscreen, Windows 10 industrial PC
Size (L × W × H)	6,050 × 3,800 × 238 3/16 × 149 5/8 × 126 in (3,200 mm)

SITE	
Electrical	400 V; approx. 45 kW; U.S. 60 Hz build confirmed at order
Compressed air	3.5 cfm (100 L/min)

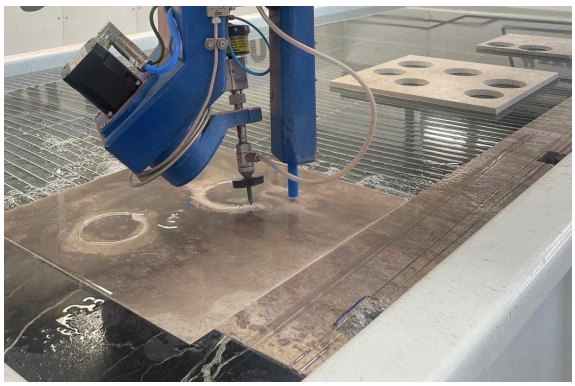
HIGH-PRESSURE PUMP	
Pump motor	49.6 HP (37 kW)
Pressure	Confirm with sales; proportional valve
Intensifier	1 intensifier, ratio 20:1
Water flow	1.1 gal/min (4.1 L/min)
Monitoring	PLC: oil temperature, oil level, water pressure; automatic safety blow-down valve
Pump supply	380–420 V, 50–60 Hz

CUTTING HEAD AND ABRASIVE	
Cutting head	Pneumatic on/off valve (normally closed); focusing tube 9.43 mm OD; orifice up to 0.36 mm
Abrasive dosing	Electronic dosage controller
Abrasive transfer	937 lb (425 kg) tank; 80 or 120 mesh; up to 4 kg/min

INCLUDED AS STANDARD

- 5-axis waterjet with hydraulic tilting table and automatic lubrication
- 49.6 HP (37 kW) intensifier pump with proportional valve
- Cutting head, electronic abrasive dosing, automatic abrasive transfer
- Digital camera; Mini CAD and CAD Cuts software
- Automatic nesting, bookmatch and vein matching software
- Point laser and cutting from a template; slab thickness reader with mapping
- Nozzle presetting device; digital handwheel with 7-inch touchscreen
- Safety doors; electrical cabinet air conditioning; net under the sheet

LAYOUT AND DIMENSIONS



HYDRA · the 5-axis head tilted while it cuts a sink opening

Specifications are subject to change without notice. Factory data; weights and dimensions are approximate, inch, pound and psi values converted and rounded. Your written quotation lists the final configuration. Images may show optional equipment. Document date: Nov 2026. Next Level Enterprises · www.nextlevel.plus · +1 941-900-3018 · sales@nextlevel.plus