TURBO SERIES

TECHNICAL SPECIFICATION SHEET

ORCA JET

5-axis CNC abrasive waterjet

Orca Jet is a pure abrasive waterjet: no saw blade, one 5-axis cutting head.



Orca Jet with pump, sand feeder and control cabinet; actual machine shown in Next Level colors







C 360° · A 76°	65,000 psi	165⅜ × 86⅝ in	±0.004 in
5-axis cutting head	Rated pressure (450 MPa)	Worktable (4,200 × 2,200 mm)	Cutting accuracy (±0.1 mm)

The head turns 360° and tilts up to 76°, so it cuts curves, sink holes, inside corners and bevels in granite, quartz, marble, sintered stone, porcelain and glass. It uses the same high-pressure pump and abrasive system as our TurboJet.

KEY FEATURES

- **5-axis gantry waterjet**
  The cutting head turns 360° on the C axis and tilts to 76° on the A axis.
- **From your CAD, while it cuts**
  DXF, DWG, IGS or ASC files by USB or PC link; nesting CAD/CAM; draw the next job while the machine cuts.
- **Pump and abrasive**
  Pressure detection and precision water filters protect the pump.

APPLICATIONS Sink and basin cut-outs, inside corners and small radii; sintered stone, porcelain, ceramic and glass as well as granite, quartz and marble; bevels and chamfers with the 0–76° A axis; inlays, medallions and shapes from DXF and DWG drawings.

ORCA JET · TECHNICAL DATA

5-AXIS CNC ABRASIVE WATERJET

WORK AREA	
Worktable	165⅜ × 86⅝ in (4,200 × 2,200 mm)
X / Y / Z stroke	153½ × 74¾ in; Z 5⅞–7⅞ in (3,900 × 1,900 mm; Z 150–200 mm)
Table	Tilting table, hot-dip galvanized
CUTTING HEAD	
Axes	5-axis gantry: X, Y, Z + A and C
C axis	360° rotation
A axis	0–76° tilt
Orifice / mixing tube	0.33 mm orifice; 1.02 mm mixing tube
Water switch	Pneumatic high-pressure water switch
ACCURACY AND MOTION	
Cutting accuracy	±0.004 in (±0.1 mm)
Repeatability	±0.001 in (±0.025 mm)
X / Y axis accuracy	≤ ±0.002 in per 11.8 in (≤ ±0.05 mm per 300 mm)
Traverse speed	20–49 ft/min (6–15 m/min)
Drives	AC servo; ball screws and linear guides in a sealed, oil-immersed stainless-steel structure
Bridge	Cast structure; low-temperature annealing heat treatment
HIGH-PRESSURE PUMP	
Pump motor	49.6 HP (37 kW)
Rated pressure	65,000 psi (450 MPa)
Working pressure	46,000–55,000 psi (320–380 MPa)
Maximum flow	0.98 GPM (3.7 L/min)
Motor rated current	66 A
Noise	< 85 dB
Protection	Pressure detection, limit alarm and automatic protection; precision water filters; fan cooling

HIGH-PRESSURE PUMP (CONT.)	
Pump size (L × W × H)	5 ft 10⅞ in × 4 ft 3⅛ in × 4 ft 8¼ in (1,800 × 1,300 × 1,430 mm)
Pump weight	2,205 lb (1,000 kg)
ABRASIVE FEED	
Automatic sand feeder	100 L; holds 331 lb (150 kg) of abrasive
Feed pressure	29 psi (0.2 MPa)
Function	Refills by air from a sand barrel up to 16 ft (5 m) away; stops when full; low-sand alarm; feeds up to two jet heads
CONTROL	
CNC	Mobile control cabinet with built-in display; PLC; independent power supply for drives, CNC and PLC
Software	Automatic nesting CAD/CAM; draw the next job while the machine cuts; self-check and diagnosis
Files	DXF, DWG, IGS and ASC; USB and PC-to-CNC transfer
Cabinet size / weight	29½ × 23⅝ × 63 in (750 × 600 × 1,600 mm); 265 lb (120 kg)
UTILITIES	
Electrical	3-phase; factory builds 220 V, 380 V or 415 V, 50/60 Hz
Water	0.9 GPM (0.2 m³/h)
Compressed air	87 psi (6 bar)
DIMENSIONS AND WEIGHT	
Machine size (L × W × H)	17 ft 4⅝ in × 9 ft 10⅛ in × 7 ft 2⅝ in (5,300 × 3,000 × 2,200 mm)
Machine weight	11,023 lb (5,000 kg)
SHIPPING	
Shipping	One 40 ft high-cube container; the cutting table can be taken apart

INCLUDED AS STANDARD

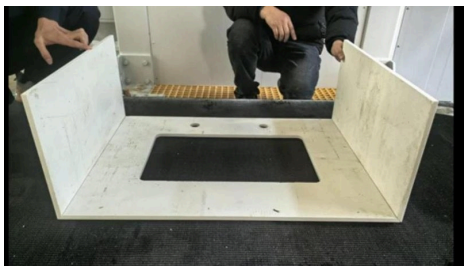
- Cutting table with 5-axis (A + C) waterjet head
- 49.6 HP (37 kW) intensifier pump, 65,000 psi rated
- Control cabinet with automatic nesting CAD/CAM
- 100 L automatic sand feeder with low-sand alarm
- Hot-dip galvanized build
- Tilting table

INSTALLATION AND TERMS

- Installation, operator training and warranty terms are stated on your Next Level quotation.
- Site and utilities must be ready before the technician arrives.
- Abrasive, orifices, mixing tubes, seals and other wear parts are not included unless listed.
- Final configuration, electrical build and delivery are confirmed in writing at order.

DETAILS







Mobile control cabinet · Basin cut by the jet · 5-axis gantry waterjet

Factory data (quotation, Nov 2026); U.S. values are converted and rounded. Pressures and flows are pump ratings; cutting speed depends on material, thickness and abrasive. Specifications are subject to change without notice. Images may show optional equipment. All dimensions and weights are approximate; U.S. values are converted from the factory's metric data. Document date: Nov 2026. Next Level Enterprises · www.nextlevel.plus · +1 941-900-3018 · sales@nextlevel.plus