

 **QUAKELOGIC**

QuakeLogic QL-HydroCut Pro 4020X5

5-AXIS ULTRA-HIGH PRESSURE ABRASIVE WATERJET CUTTING SYSTEM



✓ General System Configuration:

- Industrial 5-Axis CNC Abrasive Waterjet Cutting System
- Heavy-Duty Gantry-Type Cutting Platform
- Designed for Continuous Industrial Manufacturing Operations
- Ultra-High Pressure Intensifier Pump Technology
- Precision Abrasive Waterjet Material Processing System
- Fully Integrated CNC Motion Control Platform
- Turnkey Industrial Waterjet Cutting Solution

✓ Cutting Table & Motion System:

Parameter	Specification
• Minimum Effective Work Envelope:	• 4 m × 2 m
• X-Axis Travel:	• 155 in
• Y-Axis Travel:	• 78.7 in
• Z-Axis Travel:	• 4.3 in
• Motion Configuration:	• 3 Gantry Motion Axes + 2 Rotary Axes
• Rotary A-Axis Range:	• $\pm 60^\circ$
• Rotary C-Axis Range:	• $\pm 360^\circ$

✓ Cutting Table & Motion System:

• Positioning Repeatability:	• ±0.008 in
• Rapid Traverse Speed:	• Up to 394 IPM
• Drive System:	• Industrial AC Servo Motor System
• Linear Motion Components:	• Precision Linear Guideways & Ball Screws
• Structural Design:	• Heavy-Duty Welded Steel Gantry Construction
• Motion Protection:	• Over-Travel Limit Protection
• Axis Protection:	• Fully Enclosed Z-Axis Protection Design

✓ Ultra-High Pressure Pump System:

Parameter	Specification
• Pump Type:	• Intensifier-Type Ultra-High Pressure Pump
• Maximum Pump Pressure:	• 94,000 PSI
• Operating Pressure:	• Adjustable up to 94,000 PSI
• Pump Power:	• 50 HP
• Cooling System:	• Industrial Water Cooling System
• Pressure Regulation:	• Adjustable Working Pressure

✔ Ultra-High Pressure Pump System:

Parameter	Specification
• Safety Features:	• Automatic Over-Pressure Shutdown
• Oil Monitoring:	• Integrated Oil Temperature Monitoring
• Shift System:	• Electric Shift Control
• Pressure Stability:	• High-Pressure Attenuator System

✔ Cutting Head Configuration:

Parameter	Specification
• Cutting Method:	• Abrasive Waterjet Cutting
• Cutting Head Type:	• 5-Axis Dynamic Cutting Head
• Abrasive Delivery:	• Automatic Abrasive Feeding System
• High Pressure Valve:	• Pneumatic HP ON/OFF Valve
• Cutting Control:	• CNC-Controlled High Pressure Operation
• Precision Components:	• High-Precision Cutting Head Assembly

✓ CNC Control System:

Parameter	Specification
• CNC Platform:	• Industrial PC-Based CNC Controller
• Programming Support:	• G-Code Compatible
• CAD Compatibility:	• DXF File Import Capability
• Software Capability:	• CNC Program Auto Generation
• Motion Control:	• Simultaneous 5-Axis Motion Control
• Operator Interface:	• Industrial User-Friendly CNC Interface
• Servo Integration:	• Full Servo Axis Synchronization
• Process Monitoring:	• Real-Time Cutting Visualization

✓ Abrasive & Waste Management System:

Parameter	Specification
• Abrasive Feeding:	• Automatic Abrasive Delivery System
• Abrasive Hopper:	• Industrial Abrasive Hopper System
• Abrasive Control:	• Adjustable Abrasive Feed Rate

✔ Abrasive & Waste Management System:

Parameter	Specification
<ul style="list-style-type: none"> Waste Handling: 	<ul style="list-style-type: none"> Integrated Waste Material Management System
<ul style="list-style-type: none"> Separation Capability: 	<ul style="list-style-type: none"> Solid Waste Separation from Process Liquid
<ul style="list-style-type: none"> Sludge Management: 	<ul style="list-style-type: none"> Industrial Sludge Removal & Collection System
<ul style="list-style-type: none"> Cutting Tank Design: 	<ul style="list-style-type: none"> Industrial Water Collection Tank

✔ Supported Material Processing:

<ul style="list-style-type: none"> Stainless Steel 	<ul style="list-style-type: none"> Ceramic
<ul style="list-style-type: none"> Carbon Steel 	<ul style="list-style-type: none"> Glass
<ul style="list-style-type: none"> Aluminum 	<ul style="list-style-type: none"> Composite Materials
<ul style="list-style-type: none"> Copper 	<ul style="list-style-type: none"> Granite
<ul style="list-style-type: none"> Marble 	<ul style="list-style-type: none"> Foam & Industrial Non-Metallic Materials

✓ Installation, Training & Technical Support:



- Installation Support
- Maintenance Support
- Troubleshooting Assistance
- Technical Training Program
- CNC Operational Training
- Preventive Maintenance Guidance
- Remote Technical Assistance

✓ Electrical Requirements:



- Electrical Configuration configurable to Customer Site Requirements

✓ Warranty & Support:

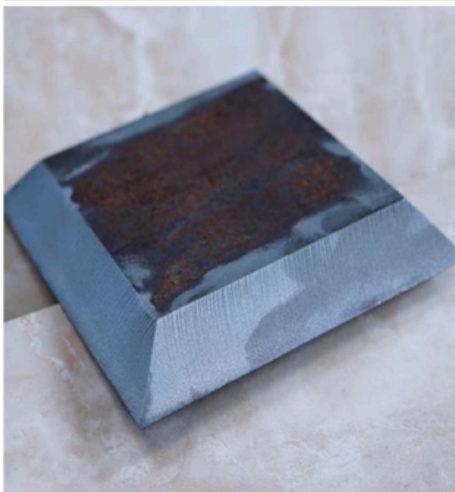
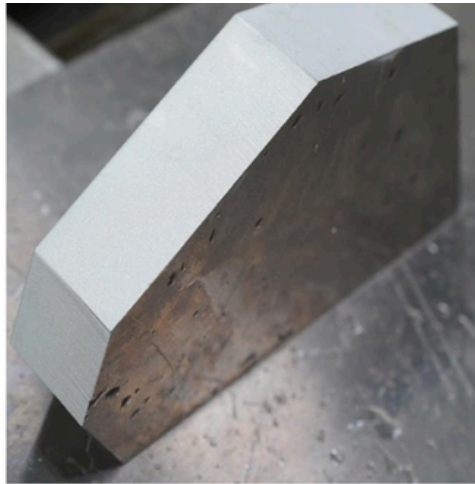


- Comprehensive Industrial System Warranty
- Technical Support Availability
- Replacement Parts Support
- Industrial Service Assistance

✓ System Applications:



- Aerospace Manufacturing
- Industrial Fabrication
- Metal Processing
- Stone & Granite Fabrication
- Precision Industrial Cutting
- Multi-Material Manufacturing Applications



Advanced Waterjet Cutting & Ultra-High Pressure Manufacturing Solutions

Corporate Headquarters

QUAKELOGIC INC.
2008 Opportunity Dr. Suite 130
Roseville, CA 95678, USA

Available Monday - Friday, 9 AM -
5 PM PST

Executive Support Line

+1 (916) 899-0391

Direct support for ultra-high pressure waterjet systems, CNC cutting operations, abrasive processing applications, and industrial manufacturing environments.

Strategic Inquiries

sales@quakelogic.net

For abrasive waterjet cutting systems, multi-axis CNC cutting solutions, industrial fabrication applications, and technical support inquiries.

Our Commitment to Industrial Waterjet Cutting Solutions

Precision Multi-Material Cutting Performance

Delivering accurate, stable, and ultra-high pressure abrasive waterjet capability for industrial metal processing, stone fabrication, composite manufacturing, and precision cutting applications.

Advanced 5-Axis Waterjet Capability

Providing simultaneous 5-axis CNC motion control, dynamic cutting head technology, precision servo synchronization, and complex multi-angle cutting capability for demanding industrial operations.

Dedicated Technical Support

Ensuring reliable operational support, installation guidance, maintenance assistance, abrasive system support, spare parts availability, and long-term industrial technical service.

Scan to Explore Industrial Waterjet Cutting Solutions



Explore 5-Axis Abrasive Waterjet Capabilities and Precision Manufacturing Applications

Discover how the QL-HydroCut Pro 4020X5 delivers ultra-high pressure cutting performance, precision 5-axis motion capability, and versatile multi-material processing solutions for advanced industrial manufacturing environments.

www.quakelogic.net