



# QuakeLogic QL-Atlas 4x8 Pro ATC

## Industrial CNC Router System

Instruction-grade, industrial CNC router engineered to fully comply with the technical, software, safety, delivery, installation, training, and warranty requirements of **RFP #26018 – CNC Router**.

Designed for full-sheet processing, precision machining, and continuous operation in academic and workforce-training environments.



 **QUAKE**LOGIC

# Working Envelope & Core Performance

The QuakeLogic QL-Atlas 4x8 Pro ATC delivers industrial-grade capabilities specifically engineered for high-volume educational and workforce training environments. This system combines expansive working capacity with precision engineering to support comprehensive instructional programs across multiple material types and applications.

## Working Area

Full **4 ft × 8 ft (48 in × 96 in)** working envelope supports complete full-sheet material processing without repositioning or material waste.

## Z-Axis Travel

Exceeds minimum **3.75 in** requirement, providing exceptional flexibility for varying material thicknesses and multi-layer processing applications.

## Spindle Power

High-power **variable-speed spindle** with power range fully compliant with **7.5–15 HP requirement** for optimal cutting performance.

## Materials Supported

- Hardwoods and softwoods
- Engineered composites
- Thermoplastics and acrylics
- Aluminum and non-ferrous metals

## Application Versatility

The system's robust construction and precision controls enable students and trainees to work with real-world materials across furniture manufacturing, cabinetry, signage production, aerospace components, and architectural millwork applications.



# Motion System, Accuracy & ATC

Precision engineering forms the foundation of the QL-Atlas 4x8 Pro ATC's exceptional performance capabilities. The advanced motion control system delivers repeatable accuracy that meets the demanding requirements of professional manufacturing environments while maintaining the reliability essential for continuous instructional use.

## Motion System



Precision **linear guide rails** paired with **ball screw drive systems** and **closed-loop servo motor drives** on all axes ensure smooth, accurate movement throughout the working envelope.

## Accuracy & Repeatability



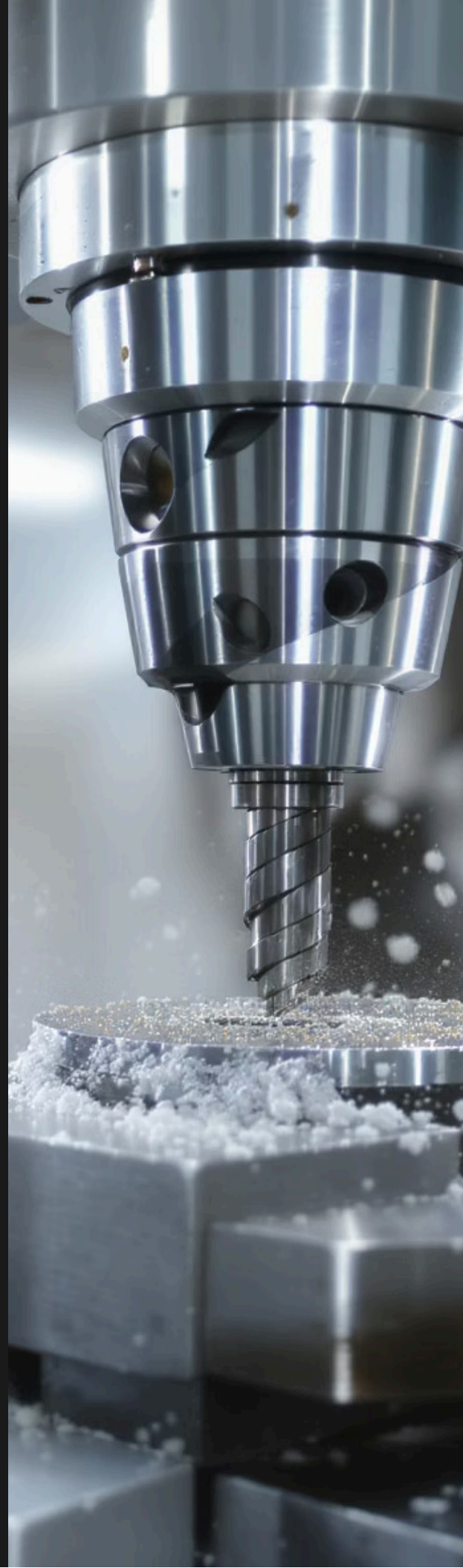
Positioning accuracy of  **$\pm 0.005$  in or better** with repeatability of  **$\pm 0.003$  in or better** guarantees consistent results across production runs.

## Automatic Tool Changer



**Automatic Tool Changer (ATC)** with minimum **6-position tool magazine** supports complex multi-operation workflows and maximizes instructional efficiency.

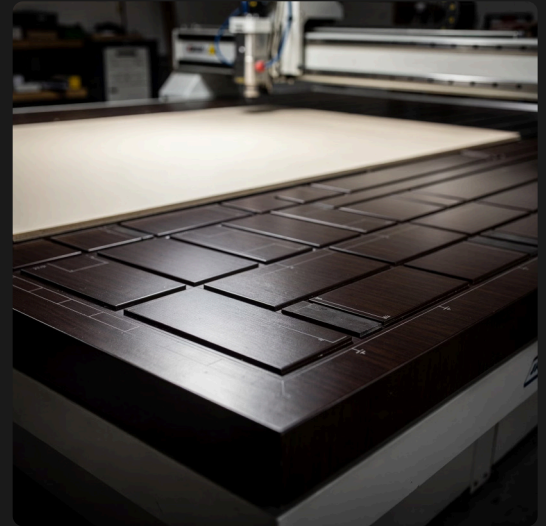
- The closed-loop servo system continuously monitors and adjusts positioning, compensating for load variations and ensuring dimensional accuracy throughout extended machining operations—critical for teaching precision manufacturing principles.



# Table, Tooling & Safety

The QL-Atlas 4x8 Pro ATC integrates advanced work-holding technology, automated tool management, and comprehensive safety systems to create a productive and secure learning environment. These features enable instructors to demonstrate professional manufacturing practices while maintaining the highest safety standards required in educational settings.

The vacuum table system provides industrial-grade material securing capabilities with the flexibility needed for diverse training applications. Sectional control allows operators to activate only the zones needed for each workpiece, optimizing energy efficiency and enabling secure hold-down for both full sheets and smaller project pieces.



1

## Vacuum Table

Industrial **vacuum table with sectional control** provides flexible hold-down for full or partial sheets, eliminating mechanical clamps and enabling uninterrupted cutting paths.

2

## Tool Management

Integrated **tool touch-off pad** enables automatic tool calibration, eliminating manual measurement errors and accelerating setup procedures for instructional demonstrations.

3

## Dust Collection

Compatible with **minimum 4-inch port connections** for industrial dust collection systems, maintaining clean air quality in educational workshop environments.

4

## Safety Features

Emergency stop systems, protective guarding, and safety provisions fully compliant with applicable **OSHA and academic safety standards** protect operators during training.

# CNC Control & Software Compatibility

The QL-Atlas 4x8 Pro ATC features an advanced CNC control system specifically optimized for instructional environments. The intuitive graphical interface reduces the learning curve for new operators while providing the sophisticated capabilities that experienced users demand. This dual-level approach ensures that students can quickly become productive while progressively developing advanced manufacturing skills.

## CNC Control System

User-friendly **graphical interface** designed specifically for instructional environments, enabling rapid skill development while supporting advanced programming capabilities.

## Software Capabilities

- Real-time **toolpath simulation and verification**
- **Production monitoring and reporting**
- **Multi-level user access controls**
- **Automatic backup and recovery**
- **Remote diagnostic capability**



### Mozaik

Cabinet and furniture design integration



### Microvellum

Architectural millwork solutions



### Cabinet Vision

Complete cabinetry workflow



### KCD Software

Custom design and nesting



### Industry Standards

Compatible with all major CAD/CAM platforms

The system's open architecture and industry-standard file format support ensure seamless integration with existing curriculum software and future technology adoption. Students gain hands-on experience with the same professional software tools they will encounter in modern manufacturing facilities, preparing them for immediate workforce entry.

# Delivery, Training, Warranty & Support

QuakeLogic's comprehensive delivery and support package ensures successful implementation of the QL-Atlas 4x8 Pro ATC at Fox Valley Technical College. Our turnkey approach eliminates installation complications and accelerates program readiness, enabling instructors to focus on curriculum delivery rather than technical logistics.

01

## Delivery

**FOB Destination – Fox Valley Technical College** with freight prepaid, ensuring complete cost certainty and eliminating unexpected transportation charges.

02

## Installation & Commissioning

Complete installation, calibration, and performance verification included. Factory-certified technicians ensure optimal system configuration and validate all specifications.

03

## Operator Training

**Minimum 24 hours of on-site operator training** for up to **six (6) personnel**, covering operation, programming, maintenance, and troubleshooting procedures.

04

## Warranty Coverage

**1-year manufacturer-backed warranty** effective after completed installation and training, covering parts, labor, and technical support per RFP requirements.

05

## Parts Availability

**Minimum 10-year parts availability commitment** ensures long-term operational sustainability and protects your capital investment throughout the equipment lifecycle.



## Ongoing Support

Beyond the initial warranty period, QuakeLogic maintains a responsive technical support infrastructure with remote diagnostic capabilities, expedited parts ordering, and access to application engineering resources. This long-term commitment ensures that Fox Valley Technical College can maintain peak operational readiness throughout the system's service life.

Our parts availability guarantee protects against obsolescence concerns, enabling confident long-term curriculum planning and budget forecasting.

# Advancing Machining Precision with QuakeLogic Excellence

Empowering technical, educational, and industrial fabrication environments with uncompromising accuracy, reliability, and operational control, the **QuakeLogic QL-Atlas 4x8 Pro ATC** sets a new benchmark for modern CNC performance. Engineered for fabrication labs, advanced manufacturing programs, and precision training facilities, the system delivers industrial-grade motion control, high-stability machining, and long-term operational durability.

## Connect with QuakeLogic: Your Partner in Precision CNC Engineering

### Corporate Headquarters

QUAKELOGIC INC.  
4010 Foothills Blvd. Suite 103/194  
Roseville, CA 95747, USA

### Factory & Warehouse

2008 Opportunity Way, Suite 130,  
Roseville CA 95747, USA

### Executive Support Line

+1 (916) 899-0391

Direct access for advanced technical consultations  
and priority instrument support.

Available Monday - Friday, 9 AM - 5 PM PST

### Strategic Inquiries

[sales@quakelogic.net](mailto:sales@quakelogic.net)

For strategic collaborations, enterprise-level  
instrumentation solutions, and comprehensive  
technical inquiries.

## Our Unwavering Commitment to Operational Excellence



### Certified Quality Assurance

Complying with international standards  
for product reliability, performance, and  
safety.



### Pioneering Industry Leadership

Delivering advanced spectroscopy and  
sensing technologies that ensure  
precision, repeatability, and ease of use.



### Dedicated Client Success

Providing responsive technical support,  
calibration guidance, and complete after-  
sales assistance for every system  
delivered.

## Explore Our Complete Product Portfolio



### Scan to Access Cutting-Edge Solutions

Discover how QuakeLogic's advanced machining technologies can transform your training programs, modernize your fabrication workflow, and elevate precision turning performance to new heights.

[www.products.quakelogic.net](http://www.products.quakelogic.net)

