

YEAR JOURNEY

Based on 17 years of experience in designing controllable systems in the field of CNC, Radonix is proud to be one of the few companies in the Middle East with CNC industrial controller design technology.

Since 2008, your satisfaction has been our priority.
Thank you for 17 years.





About Radonix

Where Art and Technology

Meet Through the Power of CNC!



Since 2008, your satisfaction has been our priority.
Thank you for 17 wonderful years.

Radonix is one of the few companies in the Middle East that possesses the technological expertise to design industrial CNC control units. Drawing on its strong engineering background, Radonix has developed advanced products that serve as the core control platform for many CNC machines and are trusted by users in several international markets.

VisionaryPerspective

We aim to become a leading brand in the field of CNC control units in the international market, contributing to the advancement of the industry and being recognized as a pioneer in technology. With our commitment to quality, innovation, and customer-focused approach, we strive for global growth.

Innovative Mission

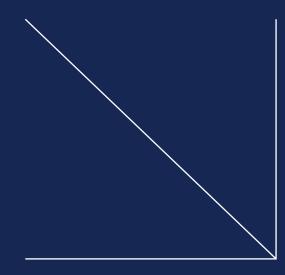
At Radonix, we aim to provide our customers with innovative, high-performance, and cost-effective CNC control solutions. By continuously optimizing our products through evolving technologies, we strive to meet industry needs in the best possible way and maintain the highest level of customer satisfaction.

A Trusted Name in the CNC Industry



Controllers

Where Art and Technology
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PC Smart 3AS

Our 3-axis CNC control board is specifically designed for cost-effective applications using stepper motors. It is also compatible with servo motors. This high-performance unit is optimized for demanding industrial environments that require precision and operational reliability.



Axes

With its 3 interpolated and independent axis structure, the device enables high-precision motion control on your machine.

Digital Inputs

The system features 8 optically isolated digital inputs that support both PNP and NPN signal types. This capability ensures smooth integration with various industrial applications while maintaining electrical isolation to enhance system safety and minimize the risk of electrical interference.



Specification

| Axes | 3 Interpolated and Independent Axes |
|------------------------------------|---|
| Digital Inputs | 8 Optically Isolated Inputs (PNP/NPN) |
| Digital Outputs | 4 Protected Outputs (PNP/NPN) |
| Relay Output | Up to 1 Amp Current |
| Analog Outputs | 2 Protected Outputs (O-10V) |
| Pulse Speed | 100,000 pulses/sec |
| Axis Pulse Type | Pulse/Direction |
| Acceleration Time | 50 to 30,000 mm/s ² |
| Speed Profile | S-Curve |
| Hardware Buffer Size | 2,000 Block FIFO |
| PC-Control Unit Data Exchange Time | 20 milliseconds |
| Isolation Type | Optocoupler |
| Communication Type | 100 Mbps LAN (TCP/IP) |
| Communication Distance | Over 20 meters via UTP Over 50 meters via SF/UTP |
| Hardware Lock | 24 Programmable Time Locks with Built-in Clock |
| Power Consumption | 12-24V, 300mA |
| Dimensions | 15 x 13 cm |
| Control Mode | Open Loop Control |
| Operating System Compatibility | Windows 7, 8, 10, 11 |
| Supported Equipment | Handwheel, Remote Controller, Joystick |



Hardware Lock - Maximum Security

Thanks to 24 time locks configurable via the built-in clock, you can set your machine to operate or shut down automatically after a specified period.

PC Smart 4A

A compact PC-based CNC control board capable of simultaneously controlling 4 axes. It offers speeds of up to 500,000 pulses per second.



Axes

Thanks to its 4 interpolated and independently controlled axes, the device provides high-precision motion control for your machine.

Digital Inputs

The system features 16 optically isolated digital inputs that support both PNP and NPN signal types. This capability ensures smooth integration with various industrial applications while maintaining electrical isolation to enhance system safety and minimize the risk of electrical interference.



Specification

| Axes | 4 Interpolated and Independent Axes |
|--------------------------------------|---|
| Digital Inputs (PNP/NPN, Isolated) | 16 Optically Isolated Inputs |
| Digital Outputs (PNP/NPN, Protected) | 8 Protected Outputs |
| Relay Output | Up to 1 Amp Current |
| Analog Outputs | 2 Protected Analog Outputs (0-10V) |
| Analog Input | 2 Analog Inputs (0-10V) |
| Pulse Speed | 500,000 pulses/sec |
| Axis Pulse Type | Pulse/Direction |
| Acceleration Time | 50 to 30,000 mm/s ² |
| Speed Profile | S-Curve |
| Hardware Buffer Size | 2,000 Block FIFO |
| PC-Control Unit Data Exchange Time | 20 milliseconds |
| Isolation Type | Optocoupler |
| Communication Type | 100 Mbps LAN (TCP/IP) |
| Communication Distance | Over 20 meters via UTP Over 50 meters via SF/UTP |
| Hardware Lock | 24 Programmable Time Locks with Built-in Clock |
| Power Consumption | 12-24V, 300 mA |
| Dimensions | 25 x 13 cm |
| Control Mode | Open Loop Control |
| Operating System | Windows 7, 8, 10, 11 |
| Supported Equipment | Handwheel, Remote Controller, Joystick |
| | |



Hardware Buffer Size (FIFO)

The 2,000-block FIFO (First-In-First-Out) buffer ensures uninterrupted and smooth data flow. This capacity enhances system performance in applications requiring high data throughput and guarantees sequential execution of commands.

PC Smart 6A

A compact PC-based CNC control board capable of simultaneously controlling 6 axes. It offers speeds of up to 500,000 pulses per second.



Axes

Thanks to its 6 interpolated and independently controlled axes, the device provides high-precision motion control for your machine.

Digital Inputs

The system features 24 optically isolated digital inputs that support both PNP and NPN signal types. This capability ensures smooth integration with various industrial applications while maintaining electrical isolation to enhance system safety and minimize the risk of electrical interference.



Specification

| Axes | 6 Interpolated and Independent Axes |
|--------------------------------------|---|
| Digital Inputs (PNP/NPN, Isolated) | 24 Optically Isolated Inputs |
| Digital Outputs (PNP/NPN, Protected) | 16 Protected Outputs |
| Relay Output | Up to 1 Amp Current |
| Analog Outputs | 2 Protected Outputs (0-10V) |
| Analog Inputs | 2 Analog Inputs |
| Pulse Speed | 500,000 pulses/sec |
| Axis Pulse Type | Pulse/Direction |
| Acceleration Time | 50 to 30,000 mm/s ² |
| Speed Profile | S-Curve |
| Hardware Buffer Size (FIFO) | 2,000 Block FIFO |
| PC-Control Unit Data Exchange Time | 20 milliseconds |
| Isolation Type | Optocoupler |
| Communication Type | 100 Mbps LAN (TCP/IP) |
| Communication Distance | Over 20 meters via UTP Over 50 meters via SF/UTP |
| Hardware Lock | 24 Programmable Time Locks with Built-in Clock |
| Power Consumption | 12-24V, 300 mA |
| Dimensions | 34 x 13 cm |
| Control Mode | Open Loop Control |
| Operating System | Windows 7, 8, 10, 11 |
| Supported Equipment | Joystick, Remote Controller, Handwheel |



Hardware Buffer Size (FIFO)

The 2,000-block FIFO (First-In-First-Out) buffer ensures uninterrupted and smooth data flow. This capacity enhances system performance in applications requiring high data throughput and guarantees sequential execution of commands.

PC-Pro LAN 4A

A compact PC-based CNC control board capable of simultaneously controlling 4 axes. It offers speeds of up to 500,000 pulses per second.



4 independent and interpolated axes







Axes

Thanks to its 4 interpolated and independently controlled axes, the device provides high-precision motion control for your machine.

Digital Inputs

The system features 24 optically isolated digital inputs that support both PNP and NPN signal types. This capability ensures smooth integration with various industrial applications while maintaining electrical isolation to enhance system safety and minimize the risk of electrical interference.



Specification

| Axes | 4 Interpolated and Independent Axes |
|--------------------------------------|---|
| Digital Inputs (PNP/NPN, Isolated) | 24 Optically Isolated Inputs |
| Digital Outputs (PNP/NPN, Protected) | 16 Protected Outputs |
| Analog Outputs | 2 Protected Analog Outputs (0-10V) |
| PWM Outputs (Adjustable Frequency) | 2 PWM Outputs (0-5V, Adjustable Frequency) |
| Pulse Speed | 500,000 pulses/sec |
| Axis Pulse Type | Pulse/Direction |
| Acceleration Time | 50 to 30,000 mm/s ² |
| Speed Profile | S-Curve |
| Hardware Buffer Size (FIFO) | 2,000 Block FIFO |
| PC-Control Unit Data Exchange Time | 20 milliseconds |
| Isolation Type | Optocoupler |
| Communication Type | 100 Mbps LAN (TCP/IP) |
| Communication Distance | Over 20 meters via UTP Over 50 meters via SF/UTP |
| Hardware Lock | 24 Programmable Time Locks with Built-in Clock |
| Power Consumption | 16-32V, 300 mA |
| Dimensions | 25 x 13 cm |
| Control Mode | Open Loop Control |
| Operating System | Windows 7, 8, 10, 11 |
| Supported Equipment | Joystick, Remote Controller, Handwheel |

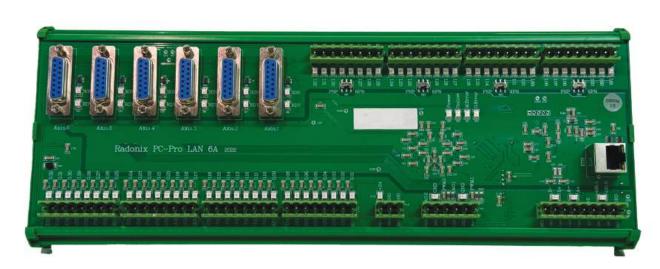


Hardware Buffer Size (FIFO)

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PC-Pro LAN 6A

A compact PC-based CNC control board capable of simultaneously controlling 6 axes. It offers speeds of up to 500,000 pulses per second.



6 independent and interpolated axes







Axes

Thanks to its 4 interpolated and independently controlled axes, the device provides high-precision motion control for your machine.

Digital Inputs

The system features 32 optically isolated digital inputs that support both PNP and NPN signal types. This capability ensures smooth integration with various industrial applications while maintaining electrical isolation to enhance system safety and minimize the risk of electrical interference.



Specification

| Axes | 6 Interpolated and Independent Axes |
|--------------------------------------|---|
| Digital Inputs (PNP/NPN, Isolated) | 32 Optically Isolated Inputs |
| Digital Outputs (PNP/NPN, Protected) | 32 Protected Outputs |
| Analog Outputs | 2 Protected Analog Outputs (0-10V) |
| PWM Outputs (Adjustable Frequency) | 2 PWM Outputs (0-5V, Adjustable Frequency) |
| Pulse Speed | 500,000 pulses/sec |
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Hardware Buffer Size (FIFO)

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Expender

Radonix X4 Expander

The Radonix X4 Expander increases the axis capacity of your CNC machines, allowing you to operate more motors simultaneously. Specifically designed for gold and jewelry CNC machining systems, this module enables you to expand your setup to up to 24 axes when used with Radonix's 6-axis controller boards.









What is X4?

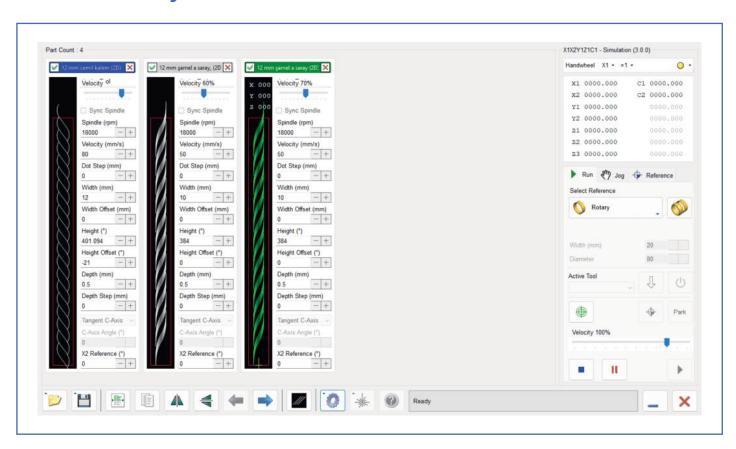
The Radonix X4 Expander is designed for gold and jewelry CNC machining systems. It takes standard step/direction signals for a single axis and distributes them to four separate motor drivers, enabling synchronized operation of motors in custom configurations such as multiple Z-axes or dual X-axes. This feature is especially valuable in complex jewelry designs and high-precision gold engraving tasks that require multiple processing heads.



Specification

| Axis Expansion | 1 to 4 |
|-------------------|--------------------|
| Input Pulse Type | Line Driver |
| Output Pulse Type | Line Driver |
| Digital Input | NPN Isolated Input |

Radonix Jewelry interface

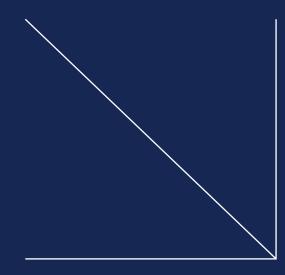






Software

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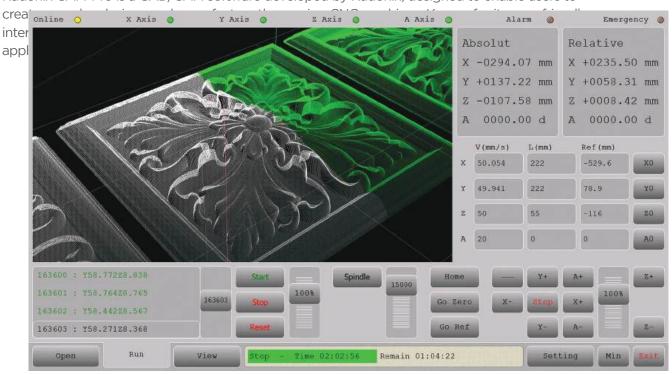


Radonix CAM-Pro Powerful CNC Control Software

Fully compatible with Radonix's PC Pro-LAN and PC Smart series controllers, Radonix CAM-Pro allows users to achieve maximum performance across all CNC machines.

What is Radonix CAM-Pro?

Radonix CAM-Pro is a CAD/CAM software developed by Radonix, designed to enable users to









30+Flexible interface-based solutions adaptable to all machine types.

%100
Optimized
Performance

2000+

Deployed in Multiple Industries

Customizable User Interfaces

Over 35 optimized interfaces tailored for CNC machines such as milling machines, lathes, laser cutters, plasma cutters, and woodworking routers. Each interface is adapted to meet the specific operational requirements of different machine types.

01

Multi-Axis Coordination

Supports programming and control of up to 6 axes simultaneously. Ideal for complex machining tasks requiring multi-dimensional motion.

02

Advanced File Compatibility

Seamless integration with industry-standard file formats such as G-Code and DXF. Full compatibility with outputs from leading CAD software.

03

Real-Time Monitoring and Control

Live status indicators for machine connections and operations across all axes. Integrated alarm systems and emergency stop functions enhance operational safety. 04

Precise Toolpath Visualization

3D visualization tools display the toolpath and machine operations in real time. Allows adjustments and accuracy checks before and during cutting operations.

05

Detailed Position and Speed Control

Gain full control over tool position, movement, and speed. Adjustable parameters for both absolute and relative coordinate systems. 06

Radonix CAM-Pro

Key Benefits

Increased Efficiency

CAM-Pro accelerates the design process, helping users boost productivity. Complex designs can be created quickly and transferred directly to production, saving both time and cost.

01

High Precision

Because it integrates directly with CNC machines, the software enables high-precision manufacturing. This is especially advantageous in sectors like automotive and metalworking, where precision is critical.

02

Flexibility

Radonix CAM-Pro is a flexible solution that can be easily adapted to various industrial applications. Users can customize the software according to their needs and apply it across different project types.

03

Ease of Use

Thanks to its intuitive interface, Radonix CAM-Pro is easy to learn, even for new users. This shortens the training period and allows users to operate the software more efficiently.

04

Conclusion

Radonix CAM-Pro plays a significant role in industrial design and manufacturing processes. With its advanced features, user-friendly interface, and high performance, the software stands out as a versatile solution across various industries—from furniture design to the automotive sector, and from metalworking to electronics manufacturing.

05

Discover Radonix CAM-Pro Today!

Parameter Specification

V1.3.112 (Compatible with control boards manufactured before 2022) Visit Our Website

V4.1.11 (Designed for control boards produced in 2022 and later) Visit Our Website

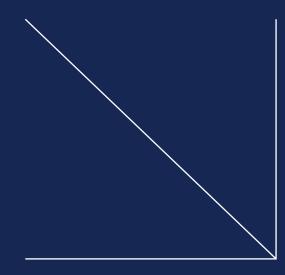


Where Art and Technology
Unite Through the Power of CNC!



Interfaces

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Meet Through the Power of CNC!





Radonix CAM-Pro CNC Interfaces

The "interface" is a specialized software environment that enables direct communication between the CNC control board and the operator, where machine-specific commands and controls are managed. Through Radonix CAM Pro, users can run interfaces tailored to different CNC machines. This allows the operator to perform tasks in an optimized environment aligned with the technical specifications of the machine.

About Interfaces

The true power of customization lies in what we call the "interface." An interface is a set of customized screens, commands, and workflows specifically designed for the capabilities and I/O (input/output) of a particular CNC machine.

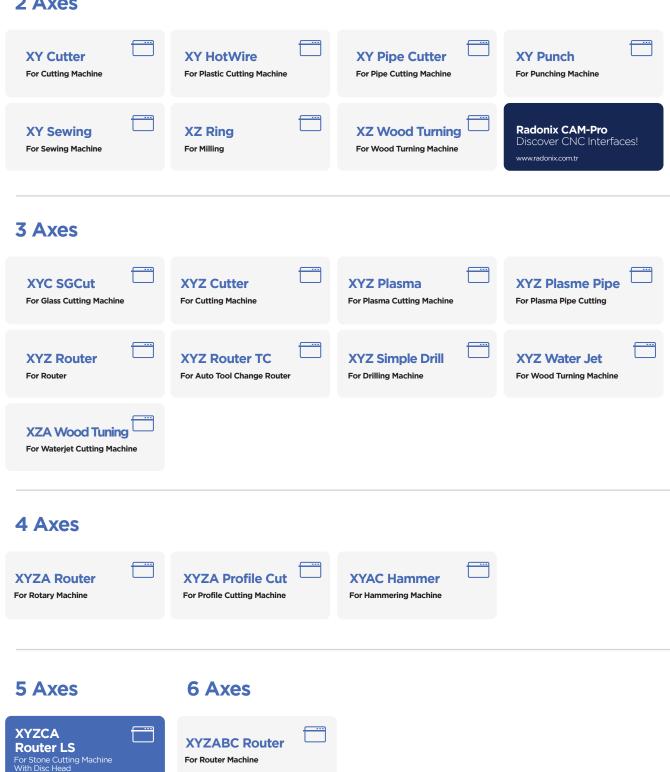
For example, a plasma cutting solution like "XYZ Plasma" offers an interface tailored to plasma cutting parameters—such as controlling cutting speed, torch height, and gas flow.

Each of these interfaces ensures that the operator sees only the tools and settings relevant to the specific machine in use. This reduces clutter, streamlines the workflow, and minimizes the risk of errors. Rather than forcing the user to navigate through general options, these specialized interfaces make CNC operation more intuitive and efficient.

An interface is a carefully crafted environment tailored to match the unique functionality of each machine.

Where Art and Technology **Meet Through the Power of CNC!**

2 Axes



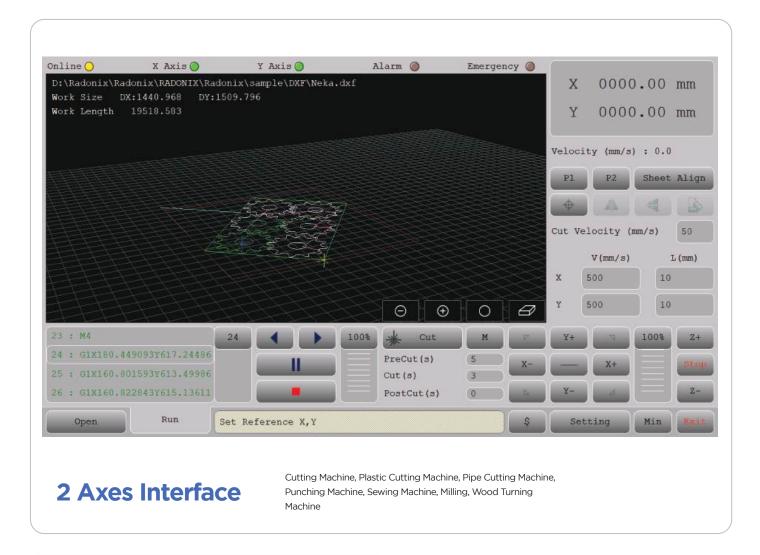
Interface Types

Interface files (in REG format) are executed through our CAM Pro application after being downloaded. Each interface includes the interface name, number of axes, last update date, applicable machine types, and any special features (e.g., tool changer). A designated image is provided with detailed descriptions for clarity.

Custom Interface Requests

If your specific CNC setup requires a custom interface not included in our current collection, please feel free to contact us. Our team is ready to design and deliver a tailored interface that meets your unique requirements.

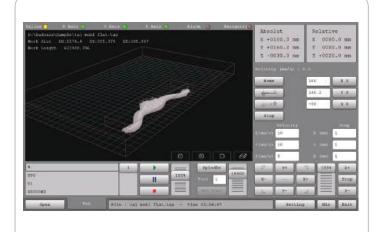
To request a custom interface, reach out to us at info@radonix.com or through our other contact channels. Be sure to provide a detailed description of your CNC setup along with the specific features you need for the custom interface.



7 Interfaces Available

To explore our Interfaces in detail, please visit www.radonix.com

Our CNC control technologies are used in machines for Glass Processing, Textiles, Woodworking, Stone & Marble Processing, Metal, Jewelry, Plastics & Composites, Ceramics, and more.

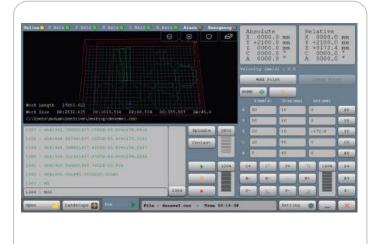


3 Axes Interfaces

Glass Cutting Machine, Cutting Machine, Plasma Cutting Machine, Plasma Pipe Cutting, Router, Auto Tool Change Router, Drilling Machine, Waterjet Cutting Machine, Wood Turning Machine

9 Interfaces Available

To explore our Interfaces in detail, please visit www.radonix.com.



5 Axes Interfaces

For Stone Cutting Machine *With Disc Head

1 Interfaces Available

To explore our Interfaces in detail, please visit www.radonix.com.

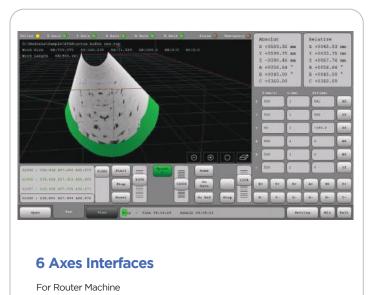


4 Axes Interfaces

Rotary Machine, Profile Cutting Machine, Hammering Machine

3 Interfaces Available

To explore our Interfaces in detail, please visit www.radonix.com.



1 Interfaces Available

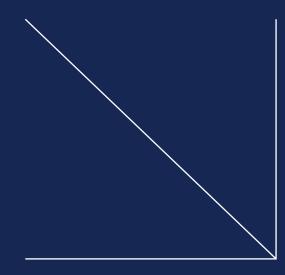
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Application Areas

Where Art and Technology

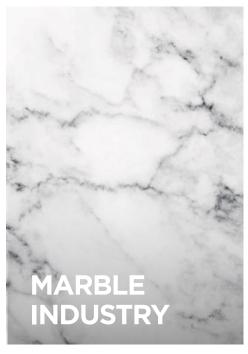
Meet Through the Power of CNC!

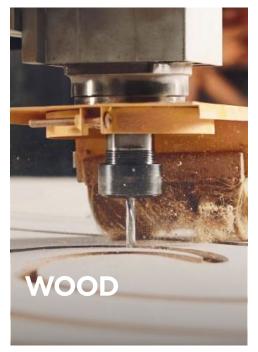


Explore the Application Areas of Our Control Boards!

Our CNC control technologies are used in machines across various industries, including Glass Processing, Textiles, Woodworking, Stone & Marble Processing, Metalworking, Jewelry, Plastics & Composites, and Ceramic Processing, among others.

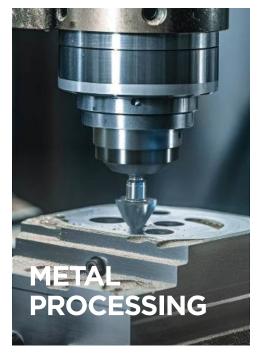
You can explore each industry to view application areas and technical specifications specific to that sector.













Where Art and Technology Meet Through the Power of CNC!







