FRONT RANGE CNC

FOUNDATION CNC ROUTER QUOTE

Flexible Manufacturing – Everyday Performance
4x8 / 5x10

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Engineered for High Production, Efficiency

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Engineered for Flexibility, Efficiency, and

Paired with industrial-grade motion components, closed-loop servos, and a proven CNC control platform, the Foundation delivers accurate, consistent cutting across a wide range of materials and applications. Whether you're building cabinets, machining plastics, shaping foam, or producing light industrial parts, the Foundation maintains the precision, surface quality, and ease of use shops rely on every day.

Production Components

Each part is chosen because it performs where cheaper machines fall short — consistent power, clean cutting, low maintenance, and long service life. That's what separates a true industrial CNC from equipment that's built to a price instead of a purpose.

And while the Foundation doesn't include every premium upgrade of the Elite, it's built from the same philosophy: use better components so your shop gets better results. When you invest in a Foundation CNC, you're getting reliability you can count on day after day, project after project.

Built for Operators Easy to Use

The interface is intentionally simple and highly responsive, giving operators instant access to programs, tooling, offsets, vacuum controls, and machine status. No clutter, no hidden menus, no frustration — just fast navigation and clear information.

With high-resolution graphics, real-time diagnostics, and logical workflows, operators spend less time searching through screens and more time running parts. Training is faster. Mistakes are reduced. Changeovers move quicker.

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The Most STANDARD Features Anywhere

Paired with a wide range of standard features — from intuitive HMI workflows to automated tool calibration, precision ball screws, and integrated dust management — the Foundation gives you professional capability without a steep learning curve. The functions a modern shop relies on are built in, streamlined, and ready to run from day one. Whether you're upgrading from an entry-level router or adding a reliable workhorse to your floor,

10HP ISO30 Spindle

The 10HP ISO30 spindle is built for shops that need versatility, clean cutting, and dependable performance across a wide range of materials. The ISO30 interface provides secure tool holding and reduced vibration, improving surface finish and accuracy in cabinetry, plastics, and light composite machining.

Beyond dependable power, the ISO30 system offers economical tooling options and straightforward maintenance, making it a strong fit for shops focused on flexibility and long-term reliability. Whether you're processing panel work, machining plastics, or cutting custom parts, the 10HP spindle keeps performance stable, predictable, and easy to manage.

5+4 Drill Bank

A 5+4 drill bank is designed to speed up your workflow without adding complexity. With five vertical spindles and four horizontal spindles arranged around the most common cabinet and casework patterns, the Foundation can drill shelf pins, construction holes, and horizontal dowels in a single setup—no tool changes and no extra handling. It gives you instant access to the hole patterns shops use every day, reducing cycle time and improving overall workflow efficiency.

The benefits are straightforward: cleaner holes, faster processing, and less load on your main spindle. For cabinet shops, signmakers, and mixed-material environments that rely on consistent hole placement, a 5+4 drill bank makes everyday production faster, smoother, and more reliable.

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The Most STANDARD Features Anywhere

10HP Rotary Vane Vacuum Pump

Every Foundation Series machine comes equipped with a single 10HP industrial rotary vane vacuum pump, delivering strong, consistent hold-down for cabinet parts, plastics, foam, and composite panels. Rotary vane technology provides reliable suction across the entire sheet, helping reduce part movement and ensuring clean edges even at faster feed rates.

For shops that need additional vacuum capacity whether for small-part nesting, porous materials, or heavier production cycles—the Foundation can be upgraded with a second pump for increased flow and stronger overall hold-down performance. This allows you to scale your vacuum system as your workload grows while maintaining stability and accuracy across every job.

7.5HP Dust Collector

Every Foundation Series machine ships with the same 7.5HP industrial dust collector included with our Elite models—ready to use on day one or kept as a spare, depending on your setup. We include it so you can count on the proper airflow, suction, and filtration without needing to source a system on your own. With strong, consistent chip removal, the collector supports cleaner cuts, clearer visibility, and a safer working environment, helping the Foundation perform exactly as intended from the moment it arrives.

Whether you connect it immediately or hold onto it for future expansion, the included dust collector removes a major variable and ensures your Foundation is “shop ready” right out of the crate.

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The Most STANDARD Features Anywhere

Included VCarve Pro & Mozaik

Every Foundation Series machine comes with Mozaik and VCarve Pro, giving your shop a complete design-to-production workflow from the moment it arrives. Mozaik provides fast, parametric cabinet design and automated nesting, while VCarve Pro adds flexible tooling control for custom work, signs, prototypes, and specialty machining. We also include fully tested post processors for both programs, ensuring clean, reliable G-code output tailored specifically to your machine.

The result is a streamlined, professional workflow that's easy for new operators to learn yet powerful enough for advanced users—so the Foundation arrives ready to cut with no added software costs, configuration delays, or setup frustration.

Tooling Included

Your machine arrives fully outfitted with the tooling you need to start cutting on day one. The Foundation includes a complete set of ISO30 toolholders along with a versatile selection of router bits chosen to support a wide range of applications—whether you're machining wood, plastics, composites, or specialty materials. Each tool is selected to cover common operations like profiling, pocketing, drilling, and finishing, allowing you to begin real production immediately.

Everything ships installed, organized, and ready to load into your tool library. No guessing, no last-minute purchases—just drop in your files and start cutting with a tooling package designed to help your shop get up and running fast in whatever workflow you operate.

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The Most STANDARD Features Anywhere

3 Year Parts Warranty

Every Foundation Series machine is backed by a comprehensive parts warranty, giving you long term confidence in the components that keep your shop running. From motion hardware to electronics, we cover the critical systems you rely on every day, so you're never left guessing about support or replacement costs. It's part of our commitment to reliability and partnership—because when you invest in a Front Range CNC, you're investing in a machine we stand behind.

Our warranty is built for real-world production environments, with fast parts availability and responsive technical support to keep downtime to a minimum. If something needs to be replaced, we make the process straightforward—no confusing terms, no runaround. The goal is simple: keep your machine cutting, keep your workflow moving, and give you complete peace of mind as your business grows.

Automatic Machine Lubrication

Your Foundation Series machine comes equipped with a fully automatic lubrication system that keeps critical motion components consistently maintained without operator effort. By delivering precise amounts of lubricant to bearings, rails, and drive assemblies, it reduces wear, improves accuracy, and extends the life of the machine. It's one of the simplest and most effective ways to protect your investment while keeping your workflow smooth and predictable.

The system monitors its own cycles and distributes lubrication at optimal intervals, ensuring consistent performance even during long shifts and demanding workloads. No manual greasing, no overlooked maintenance—just reliable, automated care that supports uptime and long-term precision. It's one more way the Foundation helps you run efficiently from day one.

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The Most STANDARD Features Anywhere

16” Z Height Clearance

The Foundation Series features an extended Z-axis with a full 16 inches of clearance, offering far more vertical capacity than what’s typically found in this class of machine. This expanded working envelope allows you to machine thicker materials, accommodate tall fixtures, run stepped or multi-layer operations, and take on specialty projects that require additional height. Whether you’re shaping foam, cutting oversized components, or working with custom tooling setups, the added clearance gives you the flexibility to handle an exceptionally wide range of applications.

By increasing the available vertical space, the Foundation becomes a more capable and adaptable tool across multiple industries. It allows shops to say yes to jobs that standard routers simply can’t support, providing greater versatility and long-term utility without additional upgrades or complexity.

2 Day Onsite Installation

Every Foundation Series machine includes a comprehensive 2-day onsite installation and training package to ensure your shop is fully up and running from day one. Our technician handles the complete setup, calibration, and verification of your system, followed by hands-on operator training tailored to the way you work. We cover core machine operation, tooling fundamentals, maintenance routines, and practical production workflows, giving your team the confidence and clarity needed to start cutting real jobs right away.

The goal isn’t just to install a CNC—it’s to set you up for success. By the time we leave, your machine is dialed in, your operators understand the essentials, and your shop is ready to produce with accuracy, consistency, and minimal learning curve.

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What Makes Front Range CNC Different

Front Range CNC was founded to raise expectations in an industry where too many machines are built to a price instead of a purpose. We focus on what shops actually need: rigidity, accuracy, dependable components, and support that shows up when you need it. No shortcuts. No surprises.

The Foundation Series is built with that same philosophy. It starts with industrial construction, closed-loop motion, reliable control hardware, and the standard features modern shops expect. Whether you're cutting cabinets, plastics, foam, or custom parts, the Foundation gives you the capability and consistency to take on real production work without unnecessary complexity.

Durability, precision, and responsive support aren't upgrades—they're built into every machine we ship. We test each system, train every customer, and back the Foundation with strong warranty coverage and reliable technical support. Because we're not just delivering a CNC router—we're helping your shop run with confidence, clarity, and long-term reliability.

Table Specs

4' x 8'

Cutting Envelope

49" x 97"

Frame Weight

5,000lbs

5' x 10'

Cutting Envelope

61" x 121"

Frame Weight

7,000lbs

Frame Specs

Table

Phenolic/Hard PVC

Bridge

Precision Milled Steel

Rails

25mm - 30mm HiWin

Drives

High Speed Syntec

Encoders

Absolute

Spindle

10HP ISO30

Technical Specs

Rapid Speed

2,500 IPM

Cutting Speed

1,600 IPM

Tolerance

+ -.005"

Repeatability

+ -.001"

Tool Magazine Size

12 Positions

Tool Change Speed

15 Seconds

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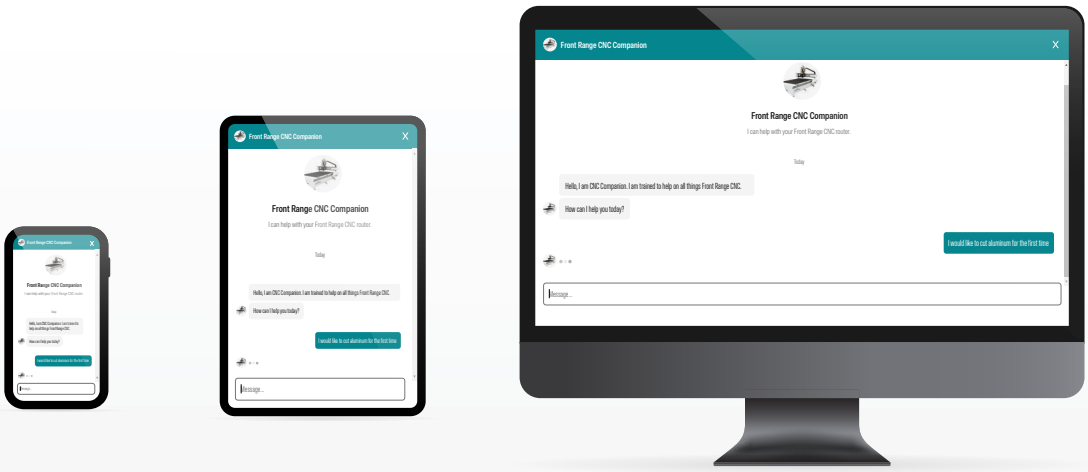
Exclusive AI Driven CNC Companion



CNC Companion puts real-world expertise at your fingertips. Running a business means juggling training, turnover, and time. This built-in AI assistant bridges that gap — offering instant answers, cutting advice, and fixturing guidance right on the controller screen.

New operators learn faster, seasoned ones work smarter, and downtime drops across the board. No long training sessions. No guessing. Just results. With multilingual support and 24/7 availability, CNC Companion

FEATURES & BENEFITS

- Instant Technical Support 24/7
- Immediate answers to technical questions.
- Step-by-step troubleshooting guides.
- Professional maintenance tips.

- Enhanced Cutting and Finishing:
- Personalized cutting recommendations.
- Expert advice for top-notch finishes.
- Advanced vacuum fixturing techniques.

- Multilingual Communication:
- Communicates in virtually any language.
- Easy-to-understand instructions for diverse teams.

- Reduce Training Time: New employees quickly get up to speed with AI-driven support.
- Minimize Downtime: Swift resolution of issues keeps machines running.
- Increase Efficiency: Expert cutting and fixturing advice streamline operations.
- Ensure Consistent Quality: Maintain high production standards despite staff changes.
- User-Friendly: Designed for operators with varying levels of technical skills.

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Foundation CNC Processing Area and Footprint

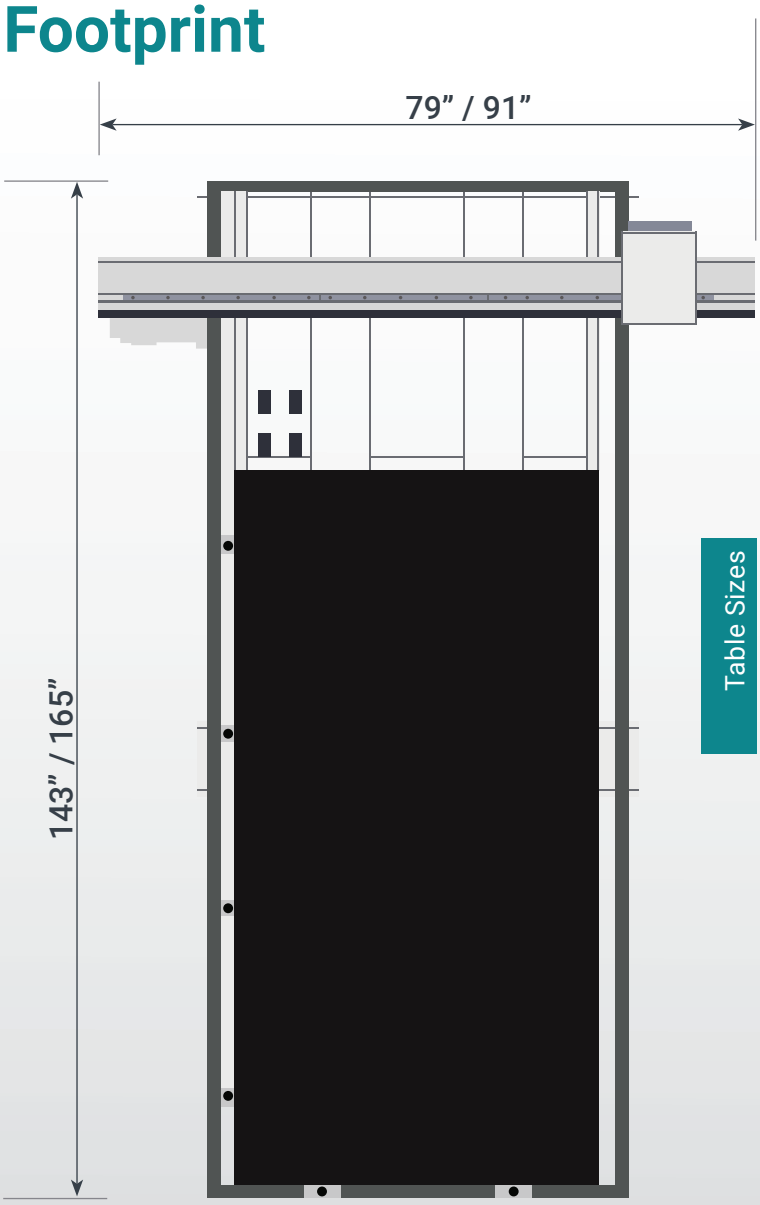

Table Sizes

4’ x 8’

X-Axis (W)	Y-Axis (L)	Z-Axis (W)
49”	97”	16”

Footprint

111” x 144” x 101”H

5’ x 10’

X-Axis (W)	Y-Axis (L)	Z-Axis (W)
61”	121”	16”

Footprint

111.5” x 176” x 101”H

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See FRCNC in Action

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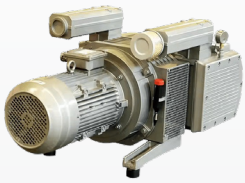
Foundation - Pricing and Options

Foundation Pricing

4x8 Foundation $60,000
5x10 Foundation $61,000

Optional Add-Ons



Additional Vacuum Pump $5,500

10HP 4 in 1 Air Compressor $7,999
Exclusive Buy With Machine Pricing

Quote Reference

Date:

Customer Name:

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