

## 3 AXIS CNC ROUTERS | Patriot Series



### Patriot 4' x 4'

The makers of Freedom Machine Tool have been building CNC routers for over 30 years and are known for providing quality, precision and reliability to the world's most successful companies. Freedom Machine Tool CNC Routers are designed & manufactured to deliver industrial quality machining at a value price.

Also available:

- 4' x 8'
- 4' x 8' Lathe
- 5' x 10'

## Specifications

### STANDARD FEATURES

- Welded Steel Base & Bridge Construction
- 25mm Profiled Rails on All Axes
- Precision Ball-Screws on All Axes
- 208/230 Volt, 3 Phase Power - 30 Amps Required
- Fagor 8037 Industrial Controller with Color Monitor
- Fagor Industrial AC Servo Motors and Amplifiers on All Axes
- Ethernet TCP / IP, USB and Serial Port Connections
- Lead Screw Drive Assembly on All Axes
- Dust Collection Hood for Spindle
- 1 Year Limited Warranty
- Basic Phone Support
- 7" Z Stroke

[See Back for Available Options](#)





## AVAILABLE OPTIONS | 4x4 Patriot CNC Router

### SPINDLE OPTIONS

- 5 HP HSD ER32 Collet Spindle 18,000 RPM. One Each 1/2 Collet & Wrenches.
- 9 HP HSD ER32 Collet Spindle 18,000 RPM. One Each 1/2 Collet & Wrenches.
- 5 HP ES915L ISO30 Quick Change Spindle for Automatic Tool Changing (ATC)
- 11 HP ES929L Quick Change Spindle for Automatic Tool Changing (ATC)
- Tangential Oscillating Knife

### SPINDLE ACCESSORIES

- 8-Position Auto Tool Change Rack
- Tool Holder Set - 8 ISO30 Tool Holders with Collet, Cover Nut & Tightening Fixture
- Unist Mist Coolant System for Cutting Non-Ferrous Metals
- Tool Height Sensor
- Material Thickness Sensor

### TABLE OPTIONS

- 4x4 Phenolic Table Machined Flat
- 4x4 Phenolic Table with 3/8" Steel-Threaded Inserts on 12" Centers
- 4x4 Phenolic Table with 3/8" Steel-Threaded Inserts on 6" Centers
- 4x4 Phenolic Table 2-Zone Vacuum Table with Two 1.5" Bronze Vacuum Valves - One Per Zone
- 4x4 Aluminum Table Machined Flat
- 4x4 Aluminum Table with 3/8" Steel-Threaded Inserts on 12" Centers
- 4x4 Aluminum Table with 3/8" Steel-Threaded Inserts on 6" Centers
- 4x4 Aluminum Table 2-Zone Vacuum Table with Two 1.5" Bronze Vacuum Valves - One Per Zone
- 4x4 Aluminum T-Slot Table on 6" Centers

### TABLE ACCESSORIES

- Dovetail Fixture
- 1" Risers - Increases Bridge Clearance to 9", Z Stroke Remains 7"
- 2" Risers - Increases Bridge Clearance to 10", Z Stroke Remains 7"
- 3" Risers - Increases Bridge Clearance to 11", Z Stroke Remains 7"

### CAD / CAM SOFTWARE OPTIONS

- Vectric VCarve Software
- Vectric Aspire Software

### CONTROL OPTIONS & ACCESSORIES

- M04 M-Code for Counter-Clockwise Spindle Rotation
- Hand Wheel with Axes Select (Fagor 100P)
- Fagor Component Extended Warranty (From 1 Year to 2 Years)
- Upgrade from Incremental to Absolute Encoders on All Axes

### UTILITY OPTIONS

- Convert to 220 Volt Single Phase Power - Requires Special Inverter & Wiring
- Air Pressure Booster

### DUST COLLECTION OPTIONS

- Dust Collection Delivery System - Dust Collector Included
- Dust Collection Delivery System - Dust Collector Not Included

### VACUUM OPTIONS & ACCESSORIES

- 5 HP Becker KVT 3.80, 48 ACFM, 220V, Single Phase, 60 HZ Vacuum
- 5 HP Becker KVT 3.10, 68 ACFM, 208, 220V, 460, 3-Phase, 60 HZ Vacuum
- 8.6 HP Becker VTLF 2.250, 169 ACFM, 208, 220V, 460, 3-Phase, 60 HZ Vacuum
- 25 HP FPZ 2-Stage Blower, 571 ACFM, 208/220V/460, 3-Phase, 60 HZ Vacuum
- 3" Automatic 2-Way Gate Valve - One Per Machine
- Low Pressure Vacuum (LPV) Switch

### SAFETY OPTIONS FOR COMPLIANCE

- Safety Shroud
- Safety Mat - Located in Front of Workspace 30D x 72W
- Single Beam Light Curtains - On Each Side Long Axis
- CE Certification
- ETL (USA) & CSA (CAN) Field Evaluations
- Low Pressure Vacuum (LPV) Switch

### SETUP, TRAINING & TECH SUPPORT SERVICES

- 3-Day On-Site Machine Setup & Training Including Expenses
- On-Site Machine Setup & Training Within 100 Miles of Factory Including Expenses
- Factory Training for First Person
- Factory Training for Each Additional Person
- Custom Consulting Rate
- Technical Phone Support