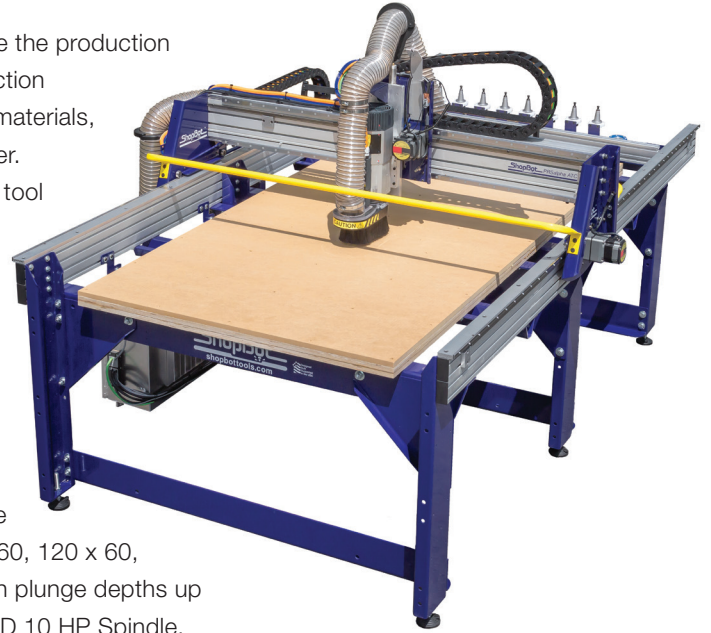


# ShopBot PRSalpha ATC CNC

The PRSalpha ATC is the affordable CNC solution that is destined to become the production powerhouse of your shop. Just like our PRSalpha tool, it provides full-production performance in the digital fabrication of wood, plastic, aluminum, and other materials, but the PRSalpha ATC has the added efficiency of an Automatic Tool Changer. An ATC reduces production time by automatically changing cutters between tool paths, thus eliminating the need for the CNC operator to change and zero tools individually. This allows the PRSalpha ATC to do the full job, even when different tooling is required to make different types of cuts – like cabinets and furniture – or where different bits are needed for roughing and finishing passes – like signs and complex 3D carvings. A machine equipped with an ATC can perform operations normally done on other pieces of equipment, eliminating the need for additional machines in the shop.



Available in traditional shop-size and larger, PRSalpha ATC tools are available with 8" or 14" Z travel. In addition to our standard size tools – 96 x 48, 96 x 60, 120 x 60, 144 x 60 – we can build your tool to any dimension up to 10' by 30' and with plunge depths up to 24 inches. Other customizable components are available, including an HSD 10 HP Spindle.

## All ShopBot PRSalpha ATC Tools Include:

- Powered by an HSD ES915 5hp spindle
- Tough precision linear bearings on the moving gantry and hardened steel rails for the X-axis
- Reliable rack-and-pinion power transmission on each axis
- Pneumatically assisted Z-axis
- Fast, closed-loop alphaStep motors fitted with low-backlash, tapered-hob gear heads on all three axes – alphaStep system monitors motor shaft positions with feedback maintaining tight synchronicity between signal and motion
- Nine-position tool bank standard. Additional tool holder positions may be added to our larger sized tools. The 5ft. can accommodate 11 tools, and the 6ft. can accommodate 14 tools.
- Sealed industrial control box
- Step resolution of .0004"
- Emergency stop disconnect switch and spindle interlock remote pendant
- Fixed position Z-zero plate and XYZ proximity switches
- Chuck holder
- Dust skirt ready to connect to your dust collector
- ShopBot Control System software to run your CNC
- Bundled with Vectric's VCarve Pro to create CNC projects
- Fully-assembled gantry module ships along with steel and aluminum table components. The engineering of our structurally integrated table allows on-site assembly and the advantage of placement of the tool in work areas with limited accessibility – while still having a factory squared, aligned, and tested machining system
- We also offer on-site set-up services, as well as training and production process consulting, as options
- Support resources and documentation
- ShopBot Handbook Notebook
- Two-year warranty

### PRSalpha ATC Dimensions (Length x Width x Plunge)

	48-48	96-48	96-60	120-60	144-60
<b>Cut/Movement Area**</b>	57" x 49" x 8" (1.45m x 1.24m x .2m)	105" x 49" x 8" (2.67m x 1.24m x .2m)	105" x 61" x 8" (2.67m x 1.55m x .2m)	129" x 61" x 8" (3.28m x 1.55m x .2m)	153" x 61" x 8" (3.89m x 1.55m x .2m)
<b>Footprint</b>	L72" x W79" x H67" (1.83m x 2.01m x 1.70m)	L120" x W79" x H67" (3.05m x 2.01m x 1.70m)	L120" x W91" x H67" (3.05m x 2.31m x 1.70m)	L144" x W91" x H67" (3.66m x 2.31m x 1.70m)	L168" x W91" x H67" (4.27m x 2.31m x 1.70m)

\*\*Actual cutting width is decreased by 10" when using a second Z axis.

Give us a call at **888-680-4466**  
to discuss your production needs.

We'll help you choose the right tool to get the job done.



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## ShopBot PRSAlpha ATC Specifications

<b>Drive Motor:</b> Closed loop steppers with 7.2:1 gearboxes. <i>With constant positional feedback to the drivers, if an obstruction is hit or cutting too fast, the drivers will attempt to correct the position of the motors before activating an alarm, stopping the machine and displaying an alarm on the monitor. Once reset and homed, cutting should be resumable.</i>	
<b>XY Move Speed</b> (with full cutting force):	Variable, max. 720 in/min (18288 mm/min)
<b>Z Move Speed</b> (with full cutting force):	Variable, max. 360 in/min (9144 mm/min)
<b>XY Positioning Speed:</b>	Variable, max 1800 in/min (45720 mm/min)
<b>Z Positioning Speed:</b>	Variable, max 900 in/min (22860 mm/min)
<b>Step Resolution:</b>	.0004" (0.010mm)
<b>Linear Cutting Force:</b>	≈150lbs. at 60 in/min
<b>X, Y, and Z Axis Drive System:</b>	Rack and Pinion
<b>Input Voltage:</b>	220v single-phase, 230v 3-phase and 380/460V 3-phase power options are available, depending on tool and configuration.
<i>Eight Input Channels (switch closure or 5-volt logic input), Eight Output Channels (5-volt logic level current).</i>	

Connecting the PRSAlpha ATC requires the services of a licensed electrician.

Please check the website or contact ShopBot for the wiring information for the set-up you are considering.

## SOFTWARE

No computer degree is needed to run a ShopBot! **Each new ShopBot includes VCarve Pro** CAD/CAM software, selected and bundled for project designing and tool-pathing. The ShopBot Control System software that runs your CNC is also included.

**The ShopBot Control System Software is compatible with many software programs.**

Compatible programs include: Fusion 360 • AutoCAD • Rhino 3D • SketchUp • Aspire • Cabinet Vision • EnRoute • KCD • MasterCAM • MillWizard • OneCNC • Shape 3D • Vector CAD CAM • Visualmill • CabinetParts Pro • DeskProto

## ACCESSORIES and ADD-ONS

- 6" or 12" Rotary Indexer
- Air Drill
- Tangential Knife
- Vacuum Hold Down Systems:  
Becker Blower, Cyclone, Hurricane, Storm
- Vacuum Hold Down Kit
- Hose Cradle Kit
- Dust Collection
- 3D Digitizing Probe

See our website for more details, or ask your salesperson about what accessories and add-ons are right for your needs.

## FREE TECHNICAL SUPPORT

Whether you're new to digital fabrication or a veteran user of CNC technology, ShopBot is here to support your efforts. We provide **free technical support 7 days a week** from our headquarters in Durham, North Carolina. We also have a vibrant online community at talkshopbot.com, sharing tips and advice with other users of digital fabrication technology.

To contact tech support:  
[support@shopbottools.com](mailto:support@shopbottools.com)

Looking for something similar to the PRSAlpha ATC that better suits your CNC needs? Ask us about our **PRStandard** and **PRAlpha** CNC machines.

**ShopBot**®

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We make the tools for making the future.