

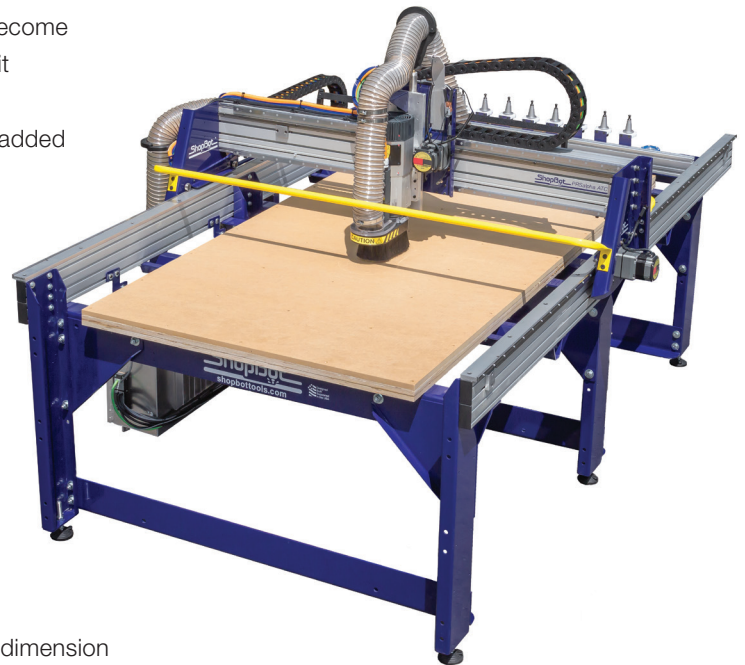
ShopBot PRSalpha ATC

Gain even more efficiency
from your investment
in digital fabrication.



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.



ShopBot®

888-680-4466 • ShopBotTools.com

We make the tools for making the future.

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.

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 12 tools, and the 6ft. can accommodate 14 tools.
- Step resolution of .0004”.
- Emergency stop disconnect switch and spindle interlock remove pendant.
- Sealed industrial control box.
- 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 powerful design software 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.
- Unparalleled support for our user community with forums, production support services, training classes, and FREE technical support.
- Two-year warranty.

PRSalpha ATC Dimensions (Length x Width x Plunge)

	48-48	96-48	96-60	120-60	144-60
Cut/ Movement Area**	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)
Footprint	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.
Spindle VFD fits to the right side of the gantry

ShopBot PRSalpha ATC Specifications

Drive Motor: Closed loop steppers with 7.2:1 gearboxes. 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 able to be resumed.	
XY Move Speed (with full cutting force)	Variable, max. 720"/min. (15.2m/min.)
Z Move Speed (with full cutting force)	Variable, max. 360"/min. (9.1m/min.)
XY Positioning Speed	Variable, max. 1800"/min. (45.7m/min.)
Z Positioning Speed	Variable, max. 900"/min. (22.8m/min.)
Step Resolution	.0004" (0.010mm)
Linear Cutting Force	≈150lbs. at 60"/min.
X, Y, and Z Axis Drive System	Rack and Pinion
Input Voltage	220v single-phase, 230v 3-phase and 380/460V 3-phase power options are available, depending on tool and configuration.*
Eight Input Channels (switch closure or 5-volt logic input), Eight Output Channels (5-volt logic level current)	

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.

We also offer software packages for use in signmaking, cabinet making and more. **Aspire by Vectric** is one of our most popular—great for designing and machining carved decorative panels and doors, custom millwork, moldings, signage, dimensional logos, jewelry, custom gifts, and much more.

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

If you are primarily working in solids or blocks, already experienced with CAD, and/or have an engineering background, consider starting with **Fusion 360**. Additional compatible software includes: AutoCAD • Rhino 3D • SketchUp • ArtCAM • Vector Art 3D • Cabinet Vision • EnRoute • KCD • MasterCAM • MillWizard • OneCNC • Shape 3D • Vector CAD CAM • Visualmill • CabinetParts Pro • DeskProto

YOUR BUSINESS NETWORK

Digital fabrication and online communication — together they are playing an important role in reshaping manufacturing in the U.S. and around the world. The *distributed manufacturing* model, which brings on-demand production and the end user closer together, is also growing fast. ShopBot Tools is a leader in supporting these developments. Our free online community, 100kGarages.com, can connect you with business opportunities around the country and the globe.

100kGarages.com
connect. collaborate. create.

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

ADDITIONAL ACCESSORIES

- **Vacuum Hold Down** is one of the most effective methods to hold down parts for CNC cutting or machining. The vacuum systems that we sell are for universal vacuum which draw air through a broad area of a permeable bleeder board to create a more uniform vacuum seal. Ask us about the Vacuum Hold Down options we have available for your ShopBot tool.
- Our new **Hose Cradle Kit** helps solve the problem of keeping your dust collection hose free from the cutting area of your tool, and contains the dust hose to keep everything streamlined.
- The **ShopBot Rotary Indexer** allows you to cut full 3-dimensional objects on your ShopBot. Like a lathe, it provides a 4th rotary axis for turning a part, but in addition, provides precise “indexed” control over rotation. It comes in two Buddy-compatible sizes and can be purchased with new tools or retro-fitted to older tools.
- The **Drag Knife Bit** enables you to cut adhesive-backed sign vinyl, paper, cardboard and thin plastics (up to 1/32”). Create vehicle graphics, professional-quality signs, banners, magnets or parts from thin plastics.
- The **Diamond Drag Engraving Bit** allows you to engrave plastic, metal, glass and stone. Engrave signatures, logos or artwork. Create custom brass name tags for trophies/plaques or permanently engrave serial numbers and ID.
- You can also add **ShopBot's 3D Digitizing Probe** to make a copy of an object in 3D. Duplicate an existing 3D shape or a piece of decorative trim or molding. Very useful for luthiers, furniture makers and restoration work.

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.

ShopBot®

888-680-4466 • ShopBotTools.com

We make the tools for making the future.

ShopBot Virtual Training

ShopBot has created FREE virtual learning options for anyone who is interested. That's how we came to develop two new online resources from ShopBot Tools: the Virtual ShopBot Workshop and the ShopBot CNC Skill Builder Series. Did we mention that you do not have to be a ShopBot user or owner in order to access them? And did we mention that they're FREE?

Virtual ShopBot Workshop



One of the things we're often talking about regarding ShopBot's CNC tools is the ability to complete complex work in a fraction of the time—and without the need for additional manpower. With all that is going on right now, you might find yourself needing to do a bit more on your own, and we think that having a ShopBot tool can help you get the work done.

And that's not just lip service. The people that work for ShopBot make use of tools in their own home workshops. The proof is in the pudding, so they say, right? That's how we arrived at creating our Virtual ShopBot Workshop, an online resource that includes videos of shop tours and training sessions, along with scheduled live virtual training sessions.

ShopBot CNC Skill Builder Training Series



ShopBot is committed to helping customers dive into and get comfortable with CNC, which is one of the many reasons we're excited to introduce the CNC Skill Builder Series. It is a project-based learning series, where ShopBot users will take the CNC skills they have gained from prior training and experience and put them to use. This series of step-by-step projects allows you to work at your own pace and then gives you the option of referring back to it again at a later time. You'll follow our instructors' videos and copy what they do, then make the project a second time and change things up — customize it by modifying the design, adding decorative elements, or test out different bits or materials.

Visit our website: www.shopbottools.com to access both the Virtual ShopBot Workshop and the ShopBot CNC Skill Builder Training series, as well as other useful information