# **Configuration Options**

Automatic Tool Changer
Multiple Tools
Long Stroke Carriage
Extended Gantry Length
Extended Gantry Height
Helical Rack and Pinions
Multiple Carriages
Direct Drive Servo Motors
Multiple Gantries
Heavy Duty Steel Gantry

# **Cutting Options**

Quick Release Spindles
Collet Spindles
Pneumatic/Electric Drills
Engraver
Multi-Spindle Drilling Head
Multi Purpose Tangential Knife
Oscillating Knife
Vinyl Knife
Heavy Duty Collet Drag Knife
Plasma Cutting

# **Accuracy Options**

AXYZ Vision System Pop-Up Location Pins Laser Digitizer

# **Secondary Options**

High Capacity Pressure Foot
Universal 5Y Pressure Foot
Nose Rider Collar
Bellows Seal
Brush Donut
Barcode Reader
Unist Mister
Vortex Cold Gun
Scantech Surface Scanner

# Vacuum System Options

Becker Dry Vane Vacuum
Mink Rotary Claw Pump
Regenerative Blower
Vacuum Manifold
Pneumatic Switching
Auto Zone Management
Vacuum Arm
ACM Chip Collection System
Precision Spoil Board



# Series System Options

AXYZ CNC Routers have the widest range of machine options available. Focusing on productivity, AXYZ has engineered machine configurations and tooling options to provide your business with the router best suited to your needs.





The option set that AXYZ International has developed over the last 20 years is easily the most diverse in the industry. Through ongoing research and development, and close ties with our industry partners and vendors, AXYZ has been able to create a large set of machine options that add enormous value to our customers.

# **CNC System Options**

The machine options have been divided into 5 sections:

**Configuration Options** – These describe the different styles of gantry and tooling configurations that are currently available for AXYZ Systems.

**Cutting Options** – These are the primary cutting tools that are available, including routers, knives, drills and more.

**Secondary Options** – These are typically accessories to make more efficient use of your CNC Router, including misters, chip collection feet and more.

**Accuracy Options** – These machine options will help you locate your material and tools for more accurate cut parts.

**Vacuum System Options** – These options include vacuum hold down pumps and blowers, as well as chip collection systems.

With all of these options there is sure to be an AXYZ or Pacer machine to meet your needs. Speak to one of our Technical Sales Specialists to help configure your ideal machine.



Integrated Solutions Delivering Everything our Customers Need

# **Configuration Options**



### **ATC - Automatic Tool Changer**

The AXYZ 7G, 21G and 33G automatic tool changer systems provide an easy and convenient method of running jobs requiring multiple routing tools. Combined with an HSD quick release spindle, and using a seven, twenty-one or thirty three position automatic carousel, the ATC system is the fastest method of changing tools on a regular basis and will deliver a dramatic improvement in throughput capacity when processing multiple tool operations.



### **Multiple Tools**

Faster and more flexible production is as easy as choosing a single, double or even triple head carriage for multiple tasking operations. This tooling configuration is popular for applications that typically require only two or three tooling processes. Rout, profile, trim and drill in a seamless sequence.



### **Long Stroke Carriage**

A carriage with extended stroke is available which works in conjunction with the extended height gantry. This allows you to machine thin materials with short tools but also process thicker materials with long reach tools. A popular option for applications such as mould making and three dimensional carving.



### **Extended Gantry Length**

Extended gantry lengths allow for full processing width when utilizing wider carriages that accommodate multiple tools or when using multiple carriages. Extended gantries can also be utilized for custom cutting solutions where "off-the-table" material processing is required.



### **Extended Gantry Height**

The standard gantry clearance is 6" for all AXYZ Series machines. For applications that need a deeper throat clearance such as mould making or three dimensional carving, extended clearances are available. Extended clearances are available at 8", 10" and 12". Other heights are available upon request. Speak to your AXYZ technical sales person for more information.



# **Configuration Options**



### **Helical Rack and Pinions**

The helical rack and pinion system is designed to provide superior high speed performance delivering greater accuracy, smoother cutting and quieter running. The helical pinions would normally be driven by the optional high performance servo motors through precision planetary gearboxes, resulting in a very rigid and powerful drive system suitable for use in all high precision and demanding applications.



## **Multiple Carriages**

To improve efficiency, multiple carriages can be mounted on one gantry to allow you to run multiple versions of the same job. Each carriage is independently driven to maintain part accuracy. For larger applications requiring full process width of a single carriage, the second carriage can conveniently be parked at the end of the gantry. Both carriages may be configured with automatic tool changer carousels.



### **Direct Drive Servo Motors**

The AXYZ servo drives deliver high speed and high torque using a precision direct drive planetary gearhead transmission. For high volume applications where cycle times need to be kept to a minimum the servo drives can help to boost productivity. Available on all axes or X and Y only as required.



### **Multiple Gantries**

Multiple gantries on a single machine bed offer the user flexibility in machine use. Run different operations at either end of the machine, or park one gantry for large job processing over virtually the entire machine length.



### **Heavy Duty Steel Gantry**

Aluminum gantries provide an ideal balance of strength to mass for most cutting applications however for situations that benefit from the greater mass of a steel gantry, our heavy duty steel gantries are available for any AXYZ Series machine.

# **Cutting Options**



### **Quick Release Spindles**

The 5.0 HP and 10.8 HP HSD quick release spindles are incredibly quiet and robust. With a simple yet powerful pneumatic quick release feature, these spindles can be operated manually or in conjunction with our ATC automatic tool changer carousel for automatic changing of tool bits.



### **Collet Spindles**

Our Elte line of collet and covernut spindles is precision balanced for fast, clean cutting and ultra-quiet operation. Available in 3, 5 and 10 HP models, and operating at maximum speeds of 18,000 (3 HP) and 24,000 rpm (5 and 10 HP) with high-speed ceramic angular contact bearings, their excellent design provides years of trouble free use.



### **Pneumatic/Electric Drills**

Automatic feed drills are fixture mounted tools that combine linear feed and rotation for all drilling operations. Available with pneumatic feed and either pneumatic or electric rotation. The pneumatic / electric combination is best for heavier duty or continuous use applications. Automatic feed drills can be added to almost any carriage configuration.



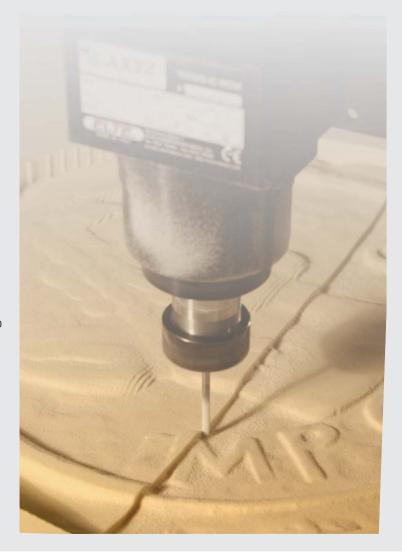
### Engraver

The engraver is specifically designed for light duty engraving on an AXYZ Series CNC Router. With an industry proven 1/4" top-loading spindle, it is well suited to tackle a wide range of materials including plastics, aluminum, brass, and more. The engraver equipped AXYZ Router table is a great alternative for large format engraving. With four mounting bolts and a quick power disconnect plug, it is very easy to install and uninstall from the table.



### **Multi-Spindle Drilling Head**

A multi spindle drilling head is a key productivity tool for cabinet makers, case good manufacturers, custom millworkers, exhibit and display manufacturers. By bringing the hole drilling process onto your CNC Router, you can reduce the material handling and potential damage to your components, and at the same time reduce your labour costs. Drill heads are available in a 5 tool L shape or a 9 tool L shape.





### **Multi Purpose Tangential Knife**

The tangential knife is a robust knife cutting tool intended for heavier, thicker and harder materials than a traditional drag knife can accommodate. A selection of easily interchangeable blade cartridges allow a wide range of material to be processed. Full directional control of the blade allows straight edges, sharp corners and all radii to be cut clearly and accurately.



### **Oscillating Knife**

The AXYZ oscillating tangential knife option is an important tool for any company that needs to process thin flexible materials including foam core, gator foam, corrugated plastic or cardboard. These materials all present challenges for traditional router or knife tools, but the oscillating knife can slice through these materials with ease, delivering clean cut edges without fraying.



### **Tangential Knife Cartridge for 45° Blades**

This tangential knife cartridge is specially designed to hold knife blades at a 45° angle and can be used to create 'V' cuts in materials such as Xanita. Reboard and others.



### Tangential Knife Cartridge for Box Cutter Blades

The box cutter cartridge holds straight, multi purpose blades suitable for cutting a wide variety of materials from thin polyester film to thick card and foam board.



### **Tangential Knife Cartridge for Creasing Wheels**

The creasing wheel cartridge can be fitted with a range of different sized and profiled creasing wheels for use in sample making applications. The creasing wheels which are sold separately are easily interchanged using a precision push fit mechanism.



### **Tangential Knife Cartridge for Pizza Wheel**

This cartridge allows the use of a rotary 'Pizza Wheel' blade which is ideal for cutting tough or abrasive materials such as gasket.



ideal for cutting hard materials such as laminates,



### Vinyl Knife

Used primarily for large format vinyl cutting, cutting paper mask on acrylic sheets for painting, and for cutting paint grip with standard vinvl cutting blades and blade holder. It can also be used for cutting vinyl on large format flex faced signs. The vinyl cutting knife can easily be attached without having to remove the spindle and as an added bonus, doubles as an effective pen plotter.



### **Heavy Duty Collet Drag Knife**

The heavy duty drag knife is designed for knife cutting applications that involve heavy gauge flexible materials. It fits into a standard drag knife operations allow fast cutting speeds with all corners radiused by the drag offset of the blade.



### **Plasma Cutting**

Convert your Router to a plasma cutter in minutes. Cut aluminum, sheet metal and stainless steel up to 1/2 inch thick at cutting speeds over 200" per minute with excellent edge quality. The Hypertherm plasma cutting option with AXYZ machine and control excellence provides an unbeatable combination. Includes torch, power supply and torch height control. An integrated fume extraction grid is also available.

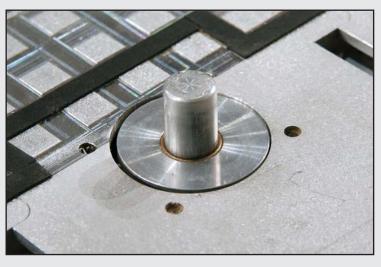


# **Accuracy Options**



### **AXYZ Vision System**

A high performance camera mounted on the head of the machine, the power behind the AVS lies in its software which is fully integrated within the new AXYZ A2MC machine control system. The primary application is digital print finishing where the camera is able to quickly find and recognize conventional registration marks and adjust the machine cutting path to achieve exact alignment with printed shapes.



### **Pop-Up Location Pins**

Hardened steel pop-up location pins are pneumatically activated to allow fast, repeatable placement of your cutting materials onto the machine. Pop-up Pins are the most reliable method of ensuring your materials are on straight and with the full pneumatic retraction, there is no fear of any cutting tool collision with the pin.



# **Secondary Options**



### **High Capacity Pressure Foot**

The high capacity chip extraction foot is a vital component of your AXYZ International CNC Router machine. Without excellent extraction of the chips and dust that is created, the mess created can be time consuming to cleanup, and can be a working hazard for your employees. Available with a non-marking contact base for pressure foot operation or a brush ring for non-contact operation.



### **Universal 5Y Pressure Foot**

The 5Y pressure foot plays just as vital a role as the high capacity pressure foot. It has been specifically engineered to accept 2" or 4" diameter hose and allows for manual adjustment of the ride height for faster material and tool setup often demanded in todays busy workplace. Chip extraction is highly efficient thanks to the unique internal cyclonic design.

### **Pressure Foot Options**



### **Nose Rider Collar**

The nose rider collar sets the protrusion of the cutting tool through the bottom of the foot to ensure an accurate and consistent depth of cut.



### **Bellows Seal**

The bellows seal significantly enhances the dust extraction process by helping to create a cyclonic vortex within the pressure foot chamber.



### **The Brush Donut**

The brush donut avoids any marking of the material whilst at the same time providing an effective solution for the removal of dust and chips.



### **Unist Mister**

For cutting non-ferrous metals including aluminum, brass and copper, the Unist mister operates with more precision and reliability than any other dispensing system available. The result is a continuous output of a microfine lubricant mist providing better cut finish and longer tool bit life.



### **Scantech Surface Scanner**

Three dimensional laser scanner for reverse engineering a 3D surface. Easily mounts to the AXYZ machine to scan the surface of a work piece. Advanced Carso software is included with the scanner which can edit the data before automatically creating the machining path for the router to follow. Use for scanning hand made or old parts for which CAD data is not available.



### **Barcode Reader**

The Barcode Reader can be used to automate certain machine operations such as loading programs and starting the machine. It is a fast and convenient way to improve productivity for high volume manufacturing but also reduces the possibility of errors and wasted materials. Includes scanner, mounting bracket, cabling and software. Requires A2MC controller.



### **Vortex Cold Gun**

The cold air gun is a simple device that utilizes filtered, compressed air and a venturi effect expansion chamber to produce cold air for spot cooling. This cost effective option eliminates heat related parts growth, most common to plastics and soft metal machining and serves to provide better edge finish and longer tool bit life.

# **Vacuum System Options**



### **Becker Dry Vane Vacuum Hold Down Pump**

The 10 HP Becker dry vane vacuum pump is perfectly suited for vacuum hold down on all AXYZ Series Routers. Providing 175 CFM, the Becker 10 HP is a quiet and reliable source for vacuum hold down. For larger hold down requirements, multiple pumps are often run in parallel to create greater CFM flow. 5 HP systems are also available for smaller machine applications.



### **Mink Rotary Claw Pump**

The Mink rotary claw pump is an ideal high performance solution for powerful vacuum hold down. It delivers a constant vacuum and is therefore suitable for use in a variety of applications on all AXYZ Series Routers. The Mink pump is oil free and can be run continuously if required. The non-contacting design of the rotors leads to a longer pump life with low maintenance.



### **Regenerative Blower for Vacuum Hold Down**

The 8.5 or 11.5 HP regenerative blower option is a low cost solution for vacuum hold down where the required cut parts are a minimum of 200 sq inches in size.



### **Vacuum Manifold**

The Automatic Vacuum extraction manifold is an effective solution for multiple Z machines. It allows focused chip collection at the active head, without the need to run multiple vacuum extraction lines to the table, and without having to manually open and close vacuum hose valves.

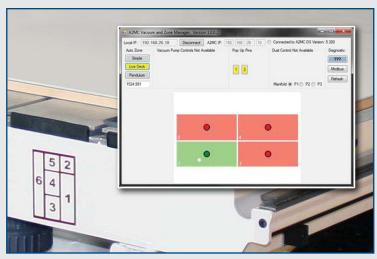


# **Vacuum System Options**



### **Pneumatic Switching**

Pneumatic vacuum valves are an option that easily allows the opening and closing of vacuum zones on your CNC Router, without repeatedly turning the ball valves on and off. Simple pneumatic toggle switches open and close the vacuum hold down zones.



### **Auto Zone Management**

This is a unique and highly configurable option which allows the AXYZ zoned vacuum system to operate in Live Deck, Pendulum Processing or independent switching modes of operation. Live Deck will automatically activate and deactivate zones according to the live position of the cutting head. This ensures the material is always held as securely as possible for best cutting results.



### **Vacuum Arm**

The vacuum arm hose steel support arm effectively and conveniently provides a third hand in supporting the dust extraction vacuum hose. Available in sizes that fit most AXYZ Router tables, the swivelling vacuum arm allows for snag free, full process table operation.



### **Precision Spoil Board**

Moisture resistant MDF spoil board. This is mechanically fixed to the T slot bed and acts as a sacrificial diffuser. It can be skimmed to provide a stable and flat working surface and is user replaceable.



### **ACM Swarf Collection System**

The ACM chip collection system is a high pressure chip collector that is configured for the efficient collection of aluminum, aluminum composite, wood and plastic chips.



"UNRIVALED VERSATILITY"



# **Contact AXYZ today for more information and** a machine quotation based on your specific needs



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