

INFINITE



XYZ

TAILORED ROUTER SOLUTIONS

Most versatile and customizable
CNC router system in the industry

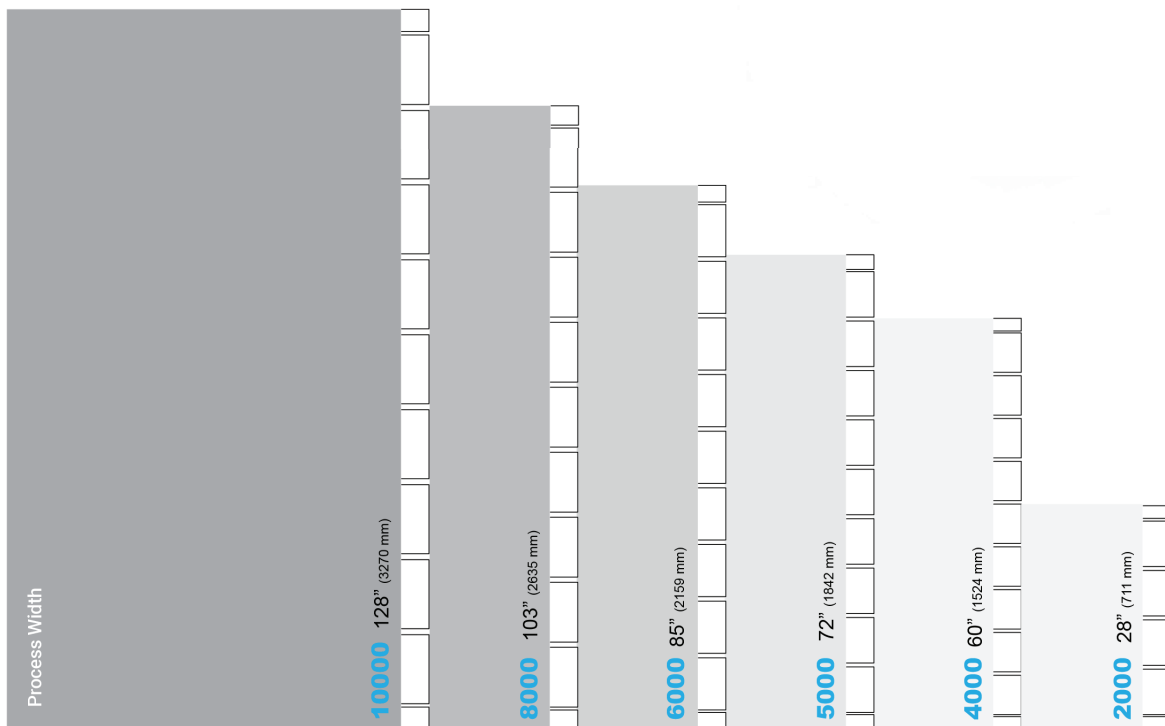
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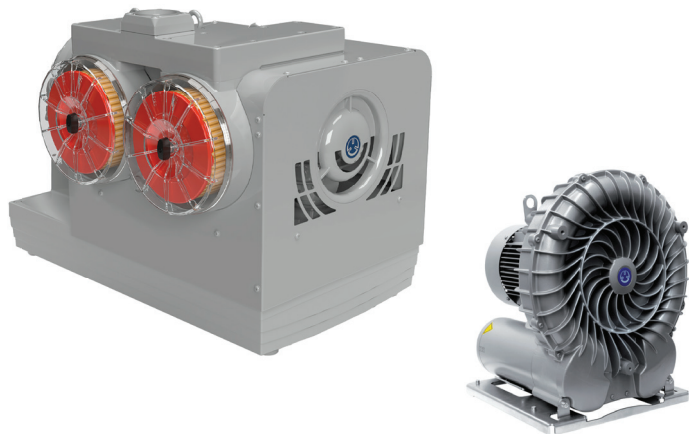
Process Area

The Infinite Series CNC routers are available in a wide variety of standard and custom sizes.

With process areas up to 128" wide by 50ft long and beyond, there is always a solution to suit your exact application requirements and budget.



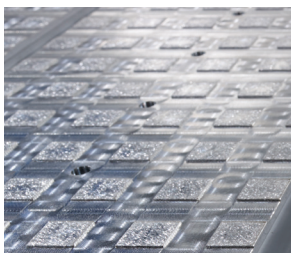
A2MC Machine Controller



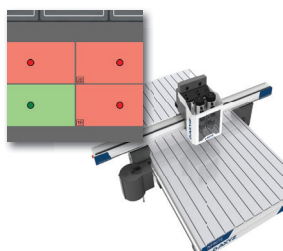
The A2MC is a next-generation machine control system, standard on all Infinite Series machines. With high-capacity, solid-state storage, there is plenty of room for programs which run fast and smoothly on the dedicated motion processor. The A2MC connects the machine to your local area network for instant and error-free program download and also includes a full remote diagnostic capability for fast support, system updates and application training.

Hold Down Options

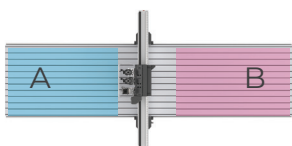
Holding the workpiece securely is an essential requirement. Infinite Series machines provide a choice of deck construction, zone configuration and control options. Choose from a range of pumps and blowers to suit your applications. Custom hold down solutions can be supplied for more challenging applications.



The innovative design of the aluminum vacuum deck allows zoned areas to be opened or closed as needed. Flat sheet materials are held securely to prevent cutting issues caused by movement or vibration.



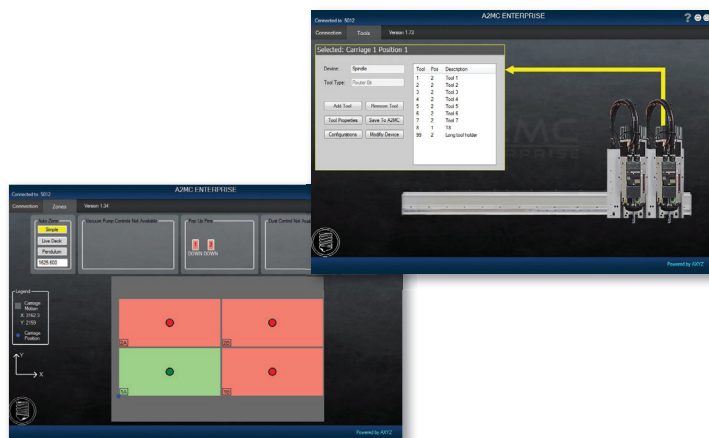
Auto zone management allows the router to operate in Live Deck mode which will automatically activate and deactivate zones according to the live position of the cutting head.



Pendulum Processing mode allows continuous production on two virtual beds. Eliminate machine downtime in between jobs to achieve up to twice the productivity.



The XYZ SmartConsole brings unprecedented ease of use, context sensitive menus, real-time display of machine status and many more time-saving, functional and productivity features. It provides a graphical preview and current status of a running job and allows program feeds and speeds to be changed without pausing the program



The A2MC Enterprise provides a powerful and easy to use graphical interface for setting up and monitoring your machine. Using a series of Windows-based apps it has been designed to help you get the best performance from your CNC router

Features



Router Spindle Options

Choose from manual, quick-release, high-power and high-speed spindles for optimum processing of rigid sheet materials.



Gantry Height

The standard 6 inch (150mm) gantry height can be changed to suit specific needs.



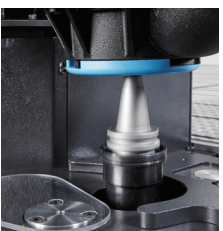
Zoned Vacuum Deck

All XYZ machines have high pressure aluminum zoned vacuum decks to maximize hold down and reduce waste.



Zone Controls

Vacuum zones can be switched with manual valves or automatically by the machine controller.



Automatic Tool Changer

The industry leading automatic toolchange systems feature a closed, protected design for safe and fast processing of complex jobs.





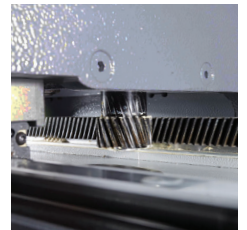
Choice of Knife Tools

Various knife tools are available to process a range of flexible and semi-rigid materials.



Drive System

Helical racks for high productivity and precision. The Z axis features precision ballscrew drives as standard. We do not offer standard racks.



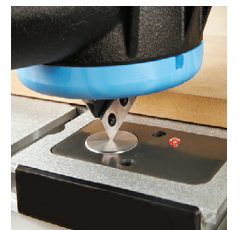
Smart Console

Full machine control at your fingertips for fast and easy machine setup in an intuitive and compact package.



Tool Length Sensor

An automatic tool length sensor which maintains accurate and consistent cut depths is standard on all AXYZ machines.



Solid Machine Base

A rigid, welded steel frame, fitted with an aluminum deck, creates a strong structure to support the most demanding processes.



Cutting Options



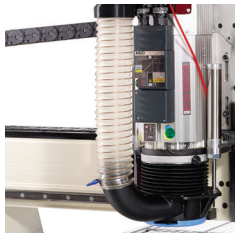
Application Specific Spindles

40,000 RPM spindles deliver high speed processing, excellent edge finishes, and are ideal for general purpose cutting of plastics and non-ferrous metals. High Torque spindles are also available for lower RPM applications.



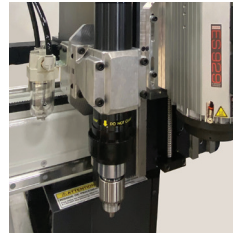
Collet Spindles

The Elte line of collet spindles are precision balanced for fast, clean cutting and ultra-quiet operation. Available in 3, 5 and 10 HP models, their excellent design provides years of trouble free use.



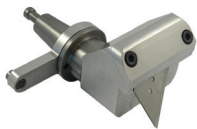
Quick Release Spindles

5, 10, 15 HP quick release spindles are incredibly quiet and robust. With a simple yet powerful pneumatic quick release feature, they can be operated manually or with our Automatic Tool Changer (ATC). HSK or ISO options.



Pneumatic Drills

Fixture mounted tools that combine linear feed and rotation for drilling operations. Available with pneumatic feed and either pneumatic or electric rotation.



Knife Cartridge for 45° Blades

Specially designed to hold knife blades at a 45 degree angle to create 'V' cuts in materials such as Xanita and Reboard.



Multi-Spindle Drilling Head

A key productivity tool for cabinet makers, case good manufacturers, custom millworkers, exhibit and display manufacturers.



Knife Cartridge for Box Cutter Blade

Holds straight, multi-purpose blades suitable for cutting a wide variety of materials from thin polyester to thick card and foam board.



Kiss Cutting Knife

The Kiss Cutting Knife expands the functionality of XYZ CNC routers allowing them to cut a wider range of materials. The knife offers the same key flexibility as the Vinyl Knife Head but does not need its own Z axis.



Knife Cartridge for Saber Blade

A robust, multi purpose tool ideal for cutting hard materials such as laminates, Styrene, Sintra and similar up to up to 2mm thick.



Oscillating Knife

This is an important tool for any company that needs to process thin flexible materials including foam core, gator foam, corrugated plastic or cardboard delivering clean cut edges without fraying.



Knife Cartridge for Pizza Wheel

Ideal for cutting tough or abrasive materials such as gasket, fiberglass, foams and insulation.



Multi Purpose Tangential Knife

A robust knife intended for heavier, thicker and harder materials. Full directional control of the blade allows straight edges, sharp corners and all radii to be cut cleanly and accurately.



Knife Cartridge for Creasing Wheels

Designed to fit a range of creasing wheel sizes for use in a variety of applications which require folding.

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Most versatile and customizable CNC router system

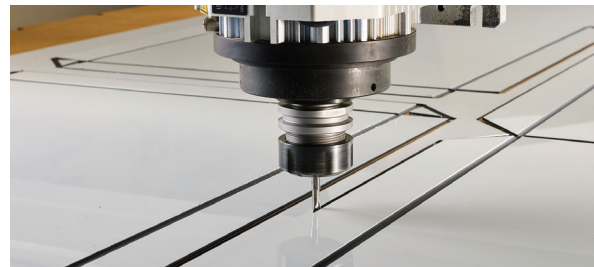
At XYZ, we deeply understand your needs. That's why the Infinite CNC router, a culmination of our legacy in precision engineering, is designed for optimal performance. Meticulously analysing cutting vibrations and load variations, the Infinite embodies our commitment to excellence, ensuring every task is executed with unmatched precision.

Capable of Cutting the Strongest Materials

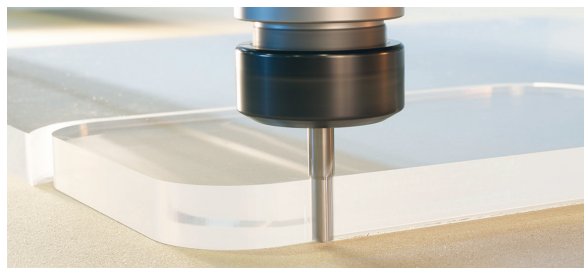
Versatile tooling options are available for all materials and applications. Fabricate parts out of aluminum, HDPE, acrylics and much more.



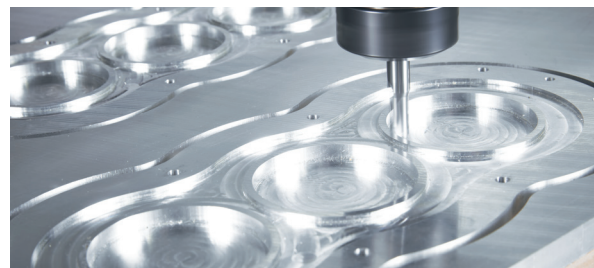
HDU



ACM



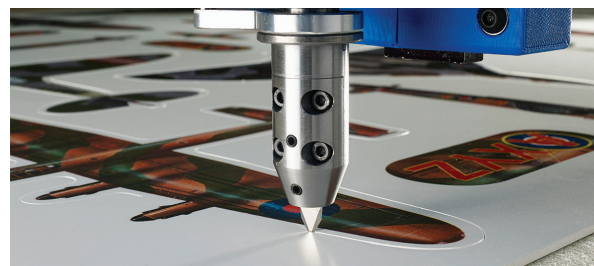
ACRYLIC



ALUMINUM

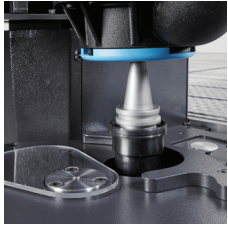


FOAM



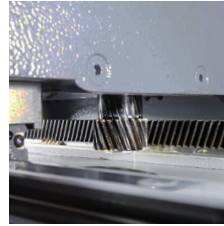
PRINT-TO-CUT

Configuration Options



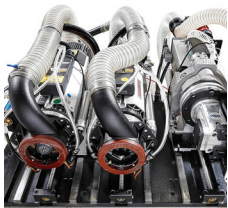
ATC - Automatic Tool Changer

Combined with an HSD quick release spindle, and using an automatic carousel with 7, 10, 14, or 21 positions, the ATC system is the fastest method of changing tools on a regular basis.



Helical Rack

Helical Racks are designed to provide superior high-speed performance, greater accuracy, smoother motion and quieter running, making them suitable for demanding, high precision applications.



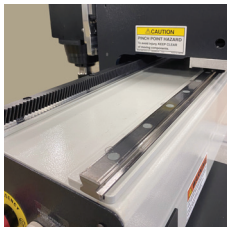
Multiple Cutting Heads

Choose a single, double or even triple-head carriage for multiple tasking operations, popular for applications that typically require only two or three tooling processes. Rout, profile, trim and drill in a seamless sequence.



Long-Stroke Carriage

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 mold making and three dimensional carving.



Heavy-Duty Steel Gantry

For situations that benefit from the greater mass of a steel gantry, our heavy-duty steel gantries are available for any Infinite Series machine.



Servo Motors

Delivering 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 boost productivity.

Model	Infinite 4000	Infinite 5000	Infinite 6000	Infinite 8000	Infinite 10,000
Cutting Envelope Length	48" to 50ft	120" to 50ft	120" to 50ft	120" to 50ft	120" to 50ft
Cutting Envelope Width	60"	72"	85"	103"	128"
Optional Additional Length	24" Increments				
Standard Gantry Clearance	6"				
Optional Gantry Clearance	8", 10", 12", 14", 16", 18"				
Drive System	X, Y – Rack and Pinion, Z – Ballscrew				
Positioning Speed	up to 2000 ipm				
Power Requirements	208-230V / 440-460V 3 Phase				