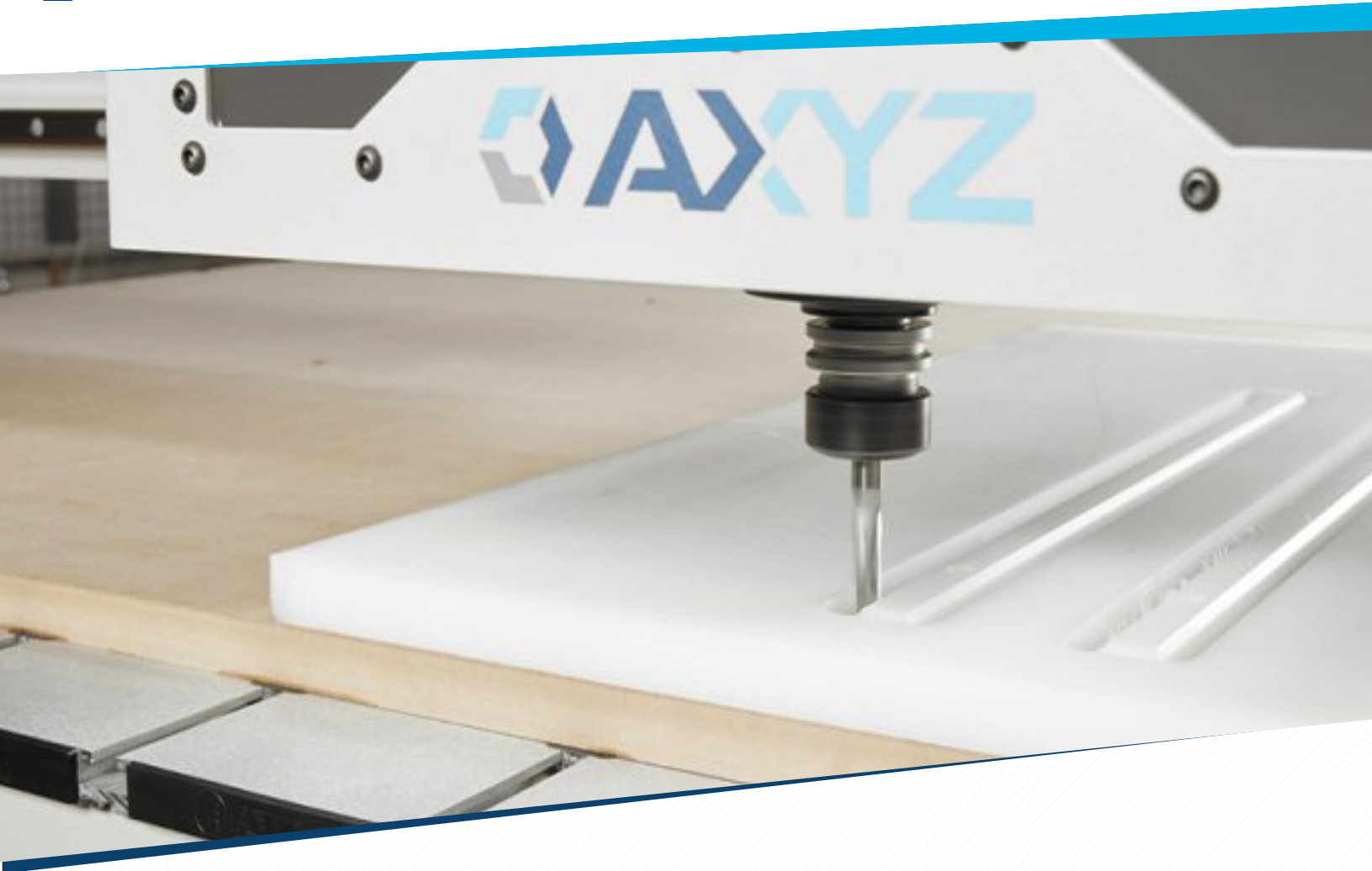


INFINITE



Most versatile and customisable
CNC router system in the industry

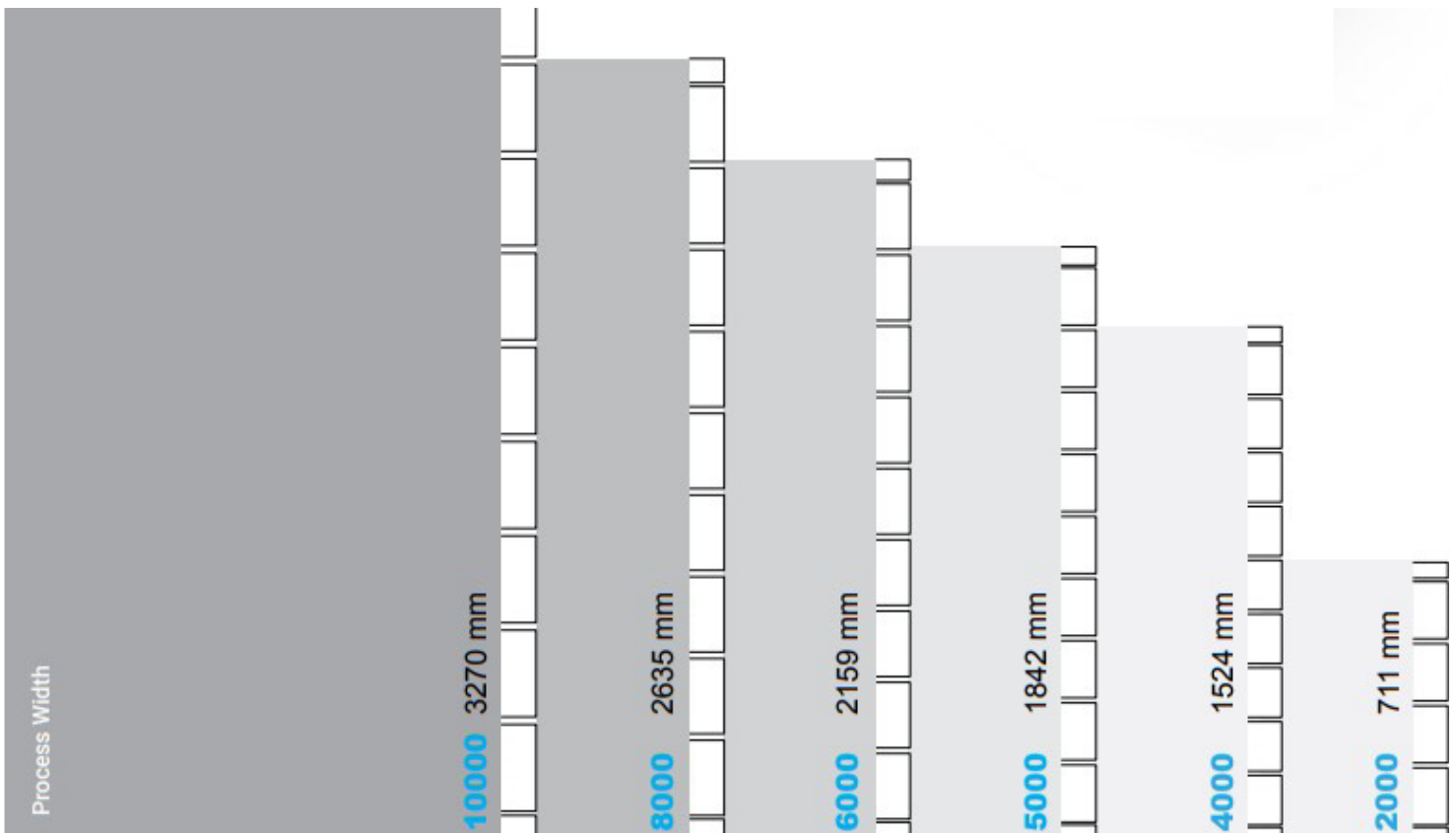
INFINITE



Process Area

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

With process areas up to 3270mm wide by 15240mm long and beyond, there is always a solution to suit your exact application requirements and budget.



Infinite

Most versatile and customisable CNC router system

Continuing the legacy of XYZ Automation CNC routers, the Infinite Series incorporates the reliability, robustness and cutting edge-technology that has always been a major part of XYZ products. The Infinite introduces a new generation of CNC routers built for today's consumer demands.

Popular industries include:

Educational Institutions
new curriculum option
for basic CNC training

Sign & Graphics Shops
easy processing of
2D/3D signs in woods,
metals, and plastics

Woodworking Shops
fabricate all types
of wood for furniture,
shopfitting, scenery
production and more

Prototyping Shops
takes the guesswork
out of projects with
simple prototyping
jobs power and speed

Capable of Cutting the Strongest Materials

Versatile head and tooling options are available for all materials and applications
Fabricate parts out of aluminium material or use the Infinite to cut HDPE.



Features



Router Spindle Options

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



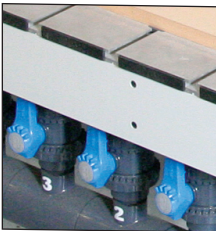
Gantry Height

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



Zoned Vacuum Deck

All AXYZ machines have high pressure aluminium zoned vacuum decks to maximise hold down and reduce waste.



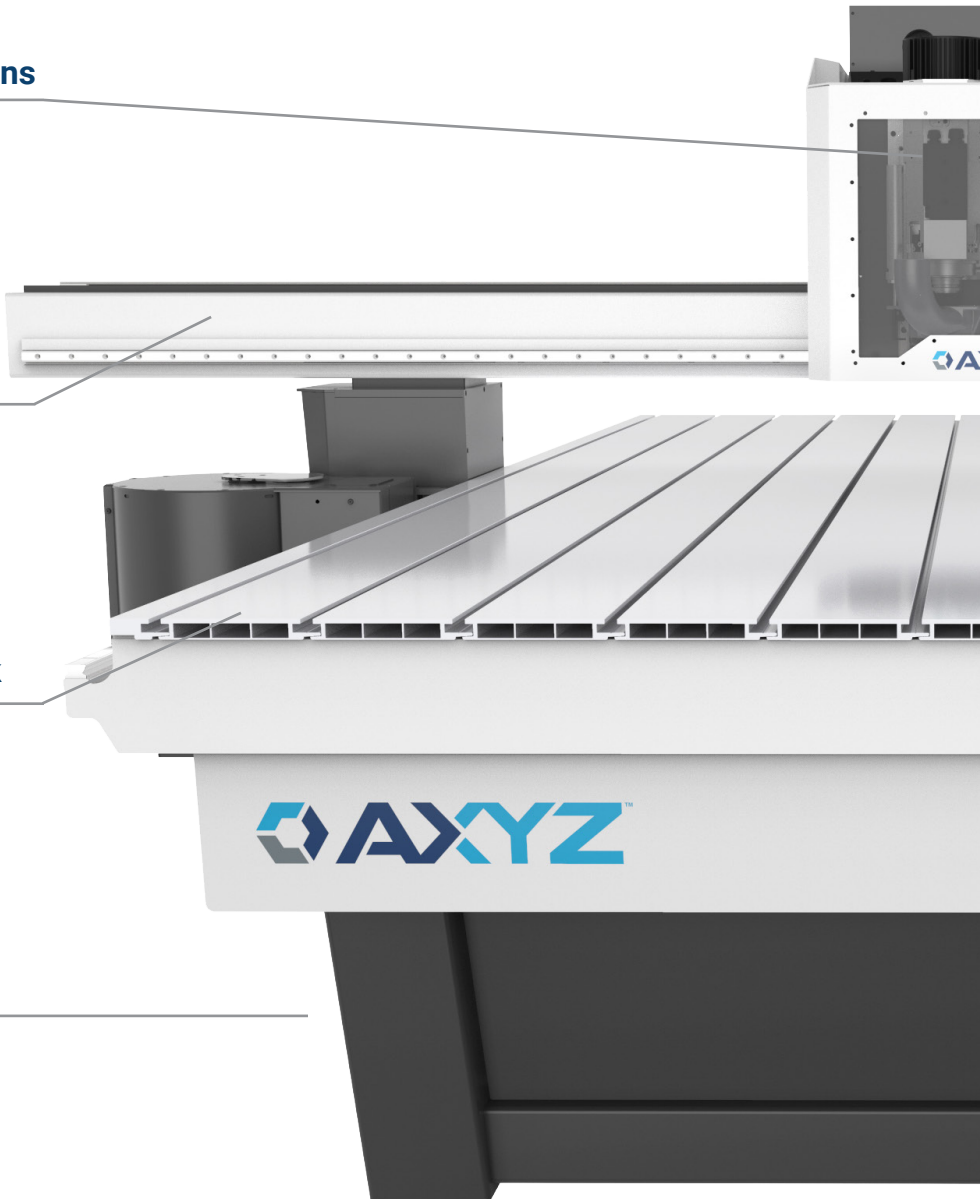
Zone Controls

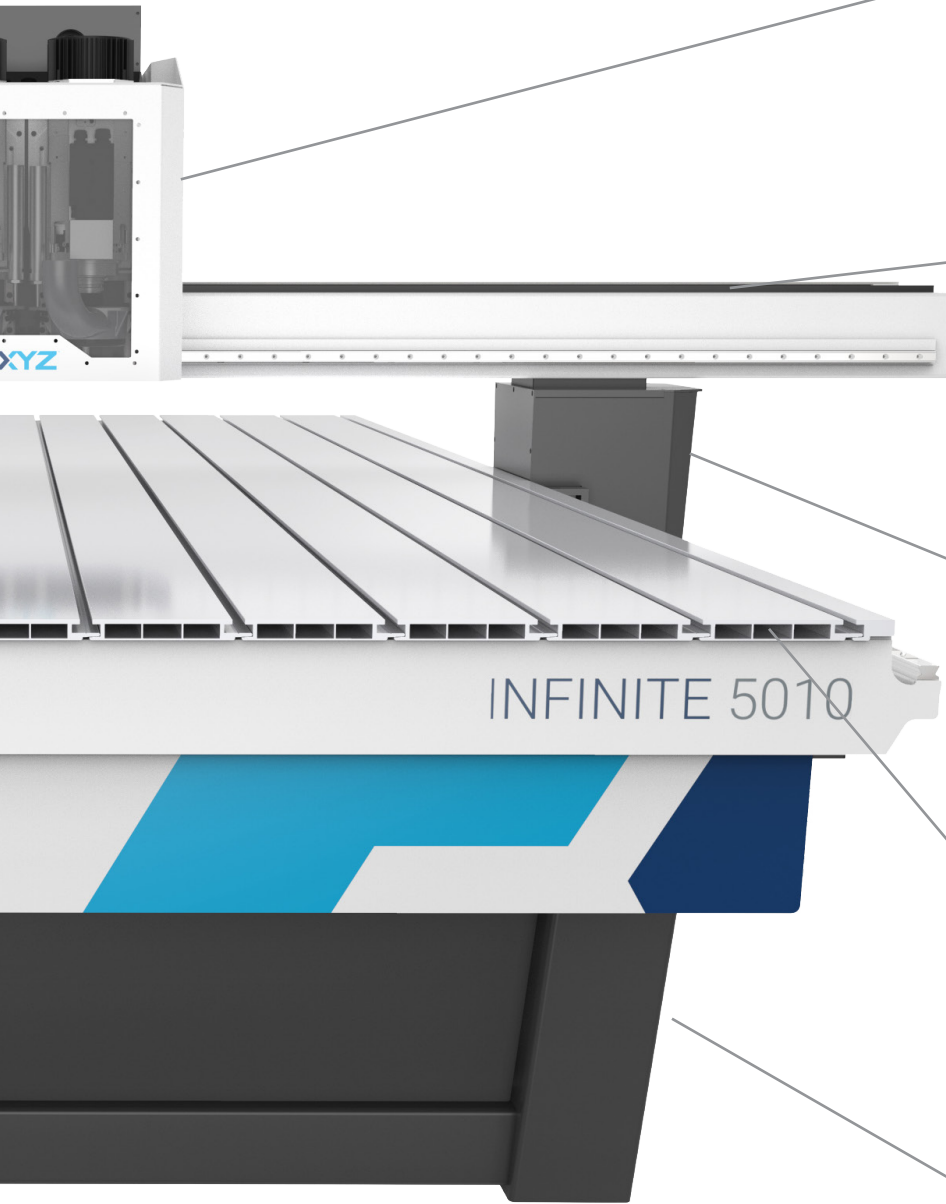
Vacuum zones can be switched with manual valves or automatically by the machine controller.



Automatic Tool Changer

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





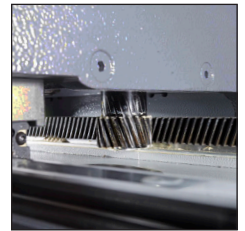
Choice of Knife Tools

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



Drive System

Choose from standard or helical racks for your choice of productivity and precision. The Z axes feature precision ballscrew drives as standard.



Smart Console

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



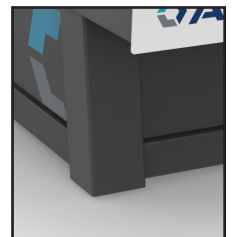
Tool Length Sensor

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



Solid Machine Base

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



Cutting Options



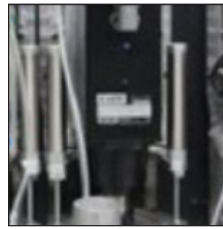
HSD 40,000 RPM High Speed Spindle

The HSD spindle operates at 6.7HP when running at speeds of 40,000 RPM delivering high speed processing, while continuing to deliver excellent edge finish. Ideal for general purpose cutting of woods, plastics and non-ferrous metals.



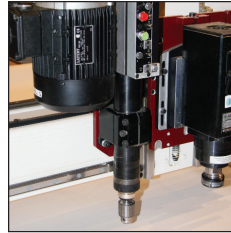
Quick Release Spindles

5 HP and 10 HP HSD 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 ATC automatic tool changer



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.



Pneumatic/Electric Drills

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



Multi-Spindle Drilling Head

A key productivity tool for cabinet makers, case good manufacturers, custom millworkers, exhibit and display manufacturers streamlining your production process dramatically



Knife Cartridge for 45° Blades

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



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.



Knife Cartridge for Saber Blade

A robust, multi purpose tool ideal for cutting hard materials such as laminates, Styrene, Sintra and similar up to about 1-2mm thick.



Knife Cartridge for Pizza Wheel

A choice of pizza wheel cartridges are available which can accommodate 2" (50mm) or 4" (100mm) diameter rotary blades. Ideal for cutting tough or abrasive materials such as gasket, fiberglass foams and insulation.



Knife Cartridge for Creasing Wheels

Designed to fit a range of different sized and profiled creasing wheels for use in sample making applications. diameter rotary blades. Ideal for cutting tough or abrasive materials such as gasket, fiberglass foams and insulation.



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.



Heavy-Duty Collet Drag Knife

Designed to cut a wide variety of flexible and semi-rigid materials the heavy-duty drag knife can easily cut paper, cardboard, rubber up to 1/2" (10mm), corrugated paper and plastic.



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.



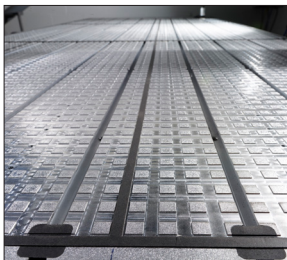
Multi Purpose Tangential Knife

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

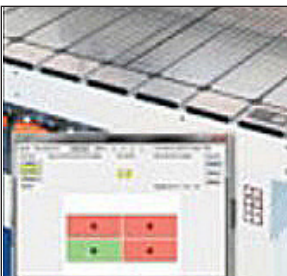


Hold Down Options

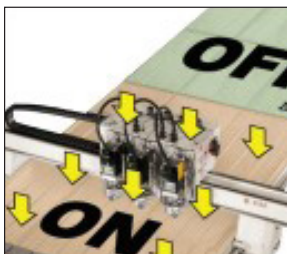
Holding the workpiece securely is an essential requirement. Infinite Series machines provide a choice of deck construction, zone configuration and control options. Choose from a range of pumps and blowers to suit your applications. Custom hold down solutions can be supplied for more challenging applications.



The innovative design of the aluminium vacuum deck allows zoned areas to be opened or closed as needed. Flat sheet materials are held as securely as possible while cutting problems caused by movement or vibration of the materials are virtually eliminated.



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.



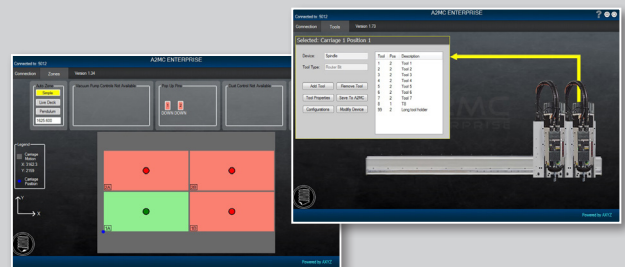
Pendulum Processing mode allows continuous production on two virtual beds. Eliminate machine downtime in between jobs to achieve up to twice the productivity.

A2MC Machine Controller

The A2MC is a next generation of machine control systems and is 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.



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



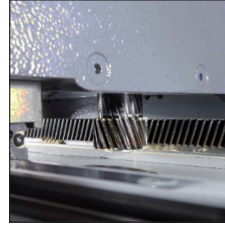
The tool length sensor is used to automatically measure the length of a tool and create an accurate tool length offset. This saves you time and ensures precise and consistent cutting depths with all tools.

Configuration Options



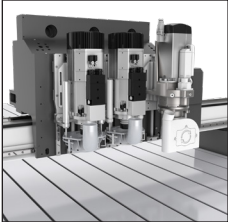
ATC - Automatic Tool Changer

Combined with an HSD quick release spindle, and using an automatic carousel with 7, 10, 14, 21 or 33 positions, the ATC system is the fastest method of changing tools on a regular basis.



Helical Rack

These are designed to provide superior high-speed performance and will deliver greater accuracy, smoother cutting and quieter running, making them suitable for use in all high precision and demanding applications



Multiple Tools

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.



High Performance Option

The High Performance Option enables the machine to run up to 2,000ipm (50m/min), delivering shorter job cycle times and greater throughput capacity



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



Multiple Gantries

Multiple gantries on a single machine bed offer 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

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	Infinite10,000
Cutting Envelope Length	1220mm to 15m	3048mm to 15m			
Cutting Envelope Width	1524mm	1842mm	2159mm	2635mm	3270mm
Optional Additional Length	609.6mm Increments				
Standard Gantry Clearance	150mm				
Optional Gantry Clearance	200mm, 250mm, 300mm, 355mm, 406mm, 455mm				
Drive System	X, Y – Rack and Pinion, Z – Ballscrew				
Typical Positioning Speed	25m/min - 50m/min				
Power Requirements	208-230V 3 Phase / 440-460V 3 Phase				