

# MULTICAM

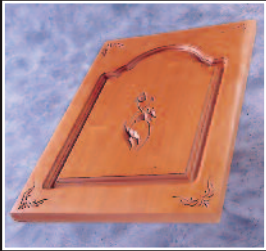
COMPUTER NUMERIC CONTROLLED ROUTERS



**MULTICAM**  
SYSTEMS PTY LTD

CNC ROUTING MACHINES • TOOLING • SOFTWARE • SALES • SERVICE

# AUSTRALIAN CNC TECHNOLOGY



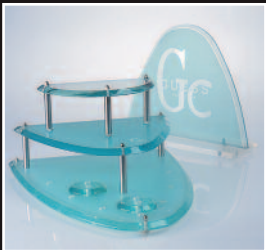
Process any material that a router bit will cut. This includes a wide range of TIMBERS, METALS, PLASTICS, FOAM, SOLID SURFACE & COMPOSITE MATERIALS. From Wardrobes & Kitchen Doors to Aluminium Boat or Aircraft components, they are all the same to a MULTICAM CNC routing machine.



Until recently, kitchen and vanity cabinets, wardrobes, bookcases and many other related timber products have been manufactured using traditional processes. Using a Multicam CNC routing machine a full sheet of components can be drilled, routed and cut in a single process.



Complex components can be drawn, or scanned then nested using many industry standard CAD programs. These components are now ready to be processed utilising Nested Based Manufacturing on the MULTICAM CNC routing machine. Sheet after sheet, all parts fit accurately together every time.



Fabrication of plastic components and routing of plastic sheets is made easy. Process your finished components directly from your CAD drawing. Using the Array command you can automatically fill an entire sheet.



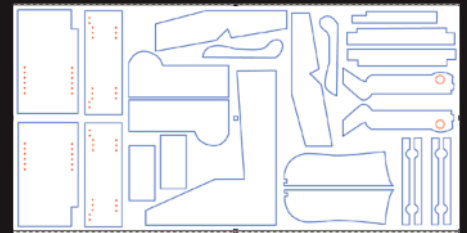
A MULTICAM CNC routing machine will achieve all your routing requirements with features specifically aimed at cutting metals. Machining Mild Steel or Aluminium sheet or plate using a MULTICAM CNC routing machine will result in trouble free operation.



Full 3 Axis control for pattern making, mould making, and solid surfacing. The Multicam's precision provides for consistent, professional results in all suitable materials. Modelling programs like MasterCAM and SurfCAM are compatible.

## NESTED BASED MANUFACTURING

Today's competitive marketplace demands more efficiency, especially since labour costs are higher than ever. Linking a Multicam CNC routing machine with industry standard software, allows you to implement **Nested Based Manufacturing (N.B.M.)** principles. **N.B.M.** eliminates repetitive processing without multiple handling of "pre-cut" rectangular pieces of material. With minimal operator skills required, you will immediately see significant savings. **Nested Based Manufacturing** is currently implemented by many companies, particularly those that manufacture kitchen cabinets, furniture, doors, vanities, plastic displays or any other product cut from flat sheet.



## TRAINING AND SUPPORT

We supply many systems to companies with no previous CNC experience. Our training program is designed to have your new machine productive as quickly as possible. Training is performed at your site, using your tools, programs and any fixtures. This allows us to train your operators and supervise your first production requirements. Qualified Multicam technicians are always available to answer any question an operator may have. With over 19 years in the sales and service of CNC routing equipment, Multicam Systems has the knowledge, advice and support you need.

## AFFORDABLE

Whether Purchasing or Leasing, the capability of the Multicam Series router to produce any combination of graphic or architectural products, makes this investment a prudent and feasible decision. The potential for future business opportunities, untouched by your present business plan, will alone justify this acquisition.





## MULTICAM SR SERIES

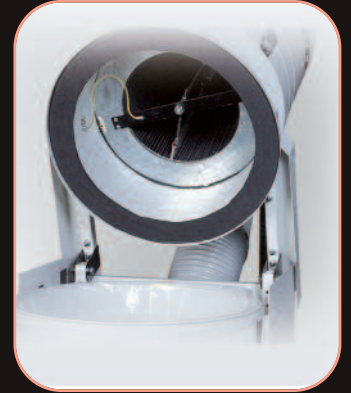
- Heavy Duty Steel Gantry (250 x 150 x 5 RHS)
- Steel Gantry and Steel Column supports are all one fabricated piece for increased rigidity.
- X axis Linear Rails mounted horizontally on our specially designed section that is machined prior to bearing rails being mounted.
- “State of the Art” fully enclosed Auto-Tool Change carousel, travelling on the gantry, providing rapid tool change at any position along the X axis.
- Soft Touch Tool Tip Sensor which automatically measures each tool length and records this to the machines Flashram.

# THE FUTURE IN DUST AND CHIP EXTRACTION

## INVEST IN A SAFER WORKPLACE

Very fine sawdust or materials that produce highly toxic abrasive matter are a problem in the working environment. The new MULTICAM Canister Dust & Chip Extraction range is the latest technology in efficient dust & chip collection and takes air filtration to the next level.

If health and safety are a priority for your business, the Multicam Canister Dust & Chip Extractors are the perfect choice.



*Opening the filter housing for dust bag removal*



*See through glass for checking dust level*

- New Design has pleated filter and plastic dust bag contained in sealed metal canisters. This reduces toxic, hazardous dust in the air.
- Pleated filter with large filter area increases filter density to 0.03microns. A standard bag system has a filter density of approximately 30microns.
- Cleaning of the filter is made easy by simply turning the handle on the top of the canister. This rotates a set of cleaning brushes inside the filter.
- Vacuum gauge shows the air flow status.
- See through glass window for checking the level in the bag.
- Choice of powerful 3hp or 5hp models.

**The Multicam Canister Dust & Chip Extractor takes dust collection to the next level of safety.**



## CNC CONTROLLER

Our Multicam A2MC Controller is a totally new concept in CNC machine control. It delivers much smoother and faster motion based on S-CURVE trajectories the highest level of machine control capabilities available on the market today. Unlike PC based controllers which run the motion right from the PC the A2MC on the Multicam uses a motion card dedicated to the machine motion. Whereas PC based controllers only integrate the motion at 40 to 60 KHz (40,000 to 60,000 integrations per second) the A2MC runs both 2D and 3D motion at 4.125 million integrations per second which is the fastest controller of any kind. This provides exceptionally smooth and continuous motion.

The A2MC incorporates a "machine area network" based on industry standard modbus protocol. This network allows for the connectivity of a limitless variety of tools, peripherals, and devices making the A2MC unmatched in flexibility and versatility.



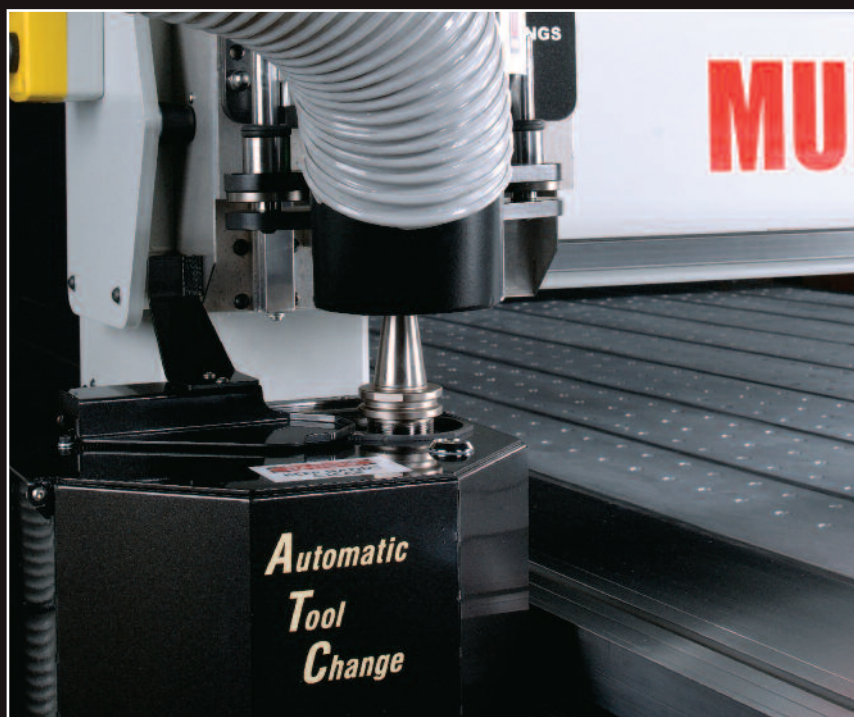
**Features include:** Gigabit Ethernet connection to a host LAN system, Wireless networking. (WiFi), Limitless file data storage, Remote accessibility activity log via Internet, Remote machine administration via Internet, Axis drive load sensing, Automatic Tool Calibration and "plug & play" connectivity of peripheral devices.

The Multicam Router runs G-Code and is fully compatible with all major CAD/CAM software packages including AlphaCam, ArtCam, BobCam, Cabinet Vision, Camworks, Enroute, MasterCam, Microvellum, StairBiz, SolidCam, and any other program that has CAD/CAM capabilities. There are NO machine memory restrictions or download time as the nc files are selected by the machine operator.

## HEAVY DUTY CNC MACHINERY

The fully Australian manufactured SR Series of Multicam CNC Routers are manufactured for heavy duty production. The steel gantry is manufactured from 250 x 150 x 5mm RHS. The steel column supports are welded to the gantry beam making it and the column supports, one rigid construction. The X axis bearings are mounted to the gantry with the Linear rails secured horizontally on our specially designed section. This section is milled prior to the bearing rails being fitted. The robust steel gantry is designed to carry heavier spindles and for cutting through thicker material at higher feedrates. The machine incorporates precision machined rack and pinion drives on the X and Y axis with a fully controllable 200mm ball screw on the Z axis as standard. The machine frame is manufactured from 150 x 150 x 5mm Steel RHS while the Z axis spindle mount is machined from 16mm plate.

Multicam CNC routing machines are used by manufacturers in various industries including Aluminium Boats, Aerospace Components, Bull Bars, Truck Body Parts, Kitchens, Timber Doors, Plastic Engineered components and Point-of-Sale displays to mention a few.



## AUTOMATIC TOOL CHANGE

All Multicam CNC Routing Machines are available with our fully enclosed Auto Tool Change Carousel. Travelling on the gantry this "State of the Art" option provides rapid tool change at any position along the X-axis. When the workpiece requires multiple tools for complex profiles, routing and boring, the tool change will perform all tasks without operator intervention. Features include tool allocation by colour groups, automatic tool length compensation, triple spindle drill head and HSD Routing Spindles with Ceramic Bearings. The simplicity, safety and quality of the fully enclosed Multicam Automatic Tool Change will soon be appreciated.

**Multicam CNC Routing Systems  
proud to be members of:**



# MULTICAM MACHINE OPTIONS



## Multicam Vision System (MVS)

The primary application of the MVS system is digital print finishing where the camera is used to quickly locate registration marks and adjust the machine cutting path to achieve exact alignment with the printed shapes. It includes non-linear/linear distortion, skew and rotation correction.



## Multi Spindle "L shaped" Drill Head

Fully independent X/Y axis drilling head used primarily in the Kitchen and Cabinetmaking industries, a number of system 32 holes are able to be produced in a single Z movement of the head. Various number of configurations are available.



## 7 or 11 Straight Multi Drill Head

These straight style drill head attachments are available with centres of 25mm, 32mm and 50mm allowing you to choose the unit that matches your requirements. Ideally suited to applications where large numbers of holes are required.



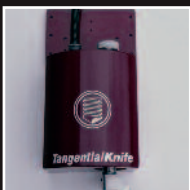
## Air Assisted Surface to Depth System

The surface to depth system is essential to ensure a constant cut depth into material. It compensates for variations in the material thickness. Used mainly when routing pencil round edges, OR V-Grooving Aluminium-Polymer composite material.



## Chisel Head

Ideal for door manufacturers or processes where a square corner is required. The chisel head is driven in to the material producing a square vertical corner. Typically the chisel head set up in with a second head and rotary tool change unit.



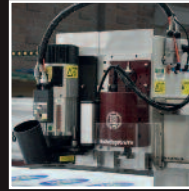
## Tangential Knife and Creasing Wheel

The tangential knife can be fitted with attachments ranging from straight knife blades, angled knife blades to "pizza" wheels for cutting or creasing a variety of materials including foams, card boards and matting materials.



## Oscillating Tangential Knife

This oscillating style knife can be fitted with different blades for cutting a variety of materials including foams, card boards, composite panels and matting materials. The reciprocating blade makes the head ideal for cutting thicker materials.



## Multiple Head Systems

Multiple head systems, available in any configuration, allow for greater flexibility in processing a wide variety of materials in a single, uninterrupted operation. Print and Cut, Rout and Knife, Rout and Drill operations are just a few examples.



## Pop Up Pins and Side Locators

Automatic pop up pins and side locators enable you to quickly position material on the machine bed. Once processing has commenced they automatically retract providing a totally clear bed surface and eliminate the need for fixed locators.



## Automatic Material Loader

Designed to automatically pick sheet material from an indexing material lifter and place it on the machine bed ready for cutting. Ideal for high production environments or where OH&S issues arise due to manual handling of heavy sheets.



## Conveyor Off Loading System

Combine the conveyor off loading table with the Automatic indexing table and material loader you have a full automatic material handling solution for your factory. Very popular in Nested Based Manufacturing situations.



## Mist Sprayers

When cutting ferrous and non ferrous materials cooling and lubricating of the cutter edge is critical. Our Mist Sprayer Units increase tool life and improve cut edge quality. Automatic operation during cutting ensures consistent results.



## Cutting Tools

We stock a wide range of cutters for routing everything from MDF and plywood to exotic composites, laminates, plastics and non ferrous metals in all popular sizes. High performance, solid carbide cutters enable you to get the most from your Multicam.



## 3D Digitising

For applications where templates or odd shaped profiles need to be entered in to the machine the 3D Digitiser allows you to trace and object and create a routing file. Robust and fully portable, the digitiser is ideal for off site applications.

SPECIFICATIONS	MULTICAM S2412	MULTICAM S2418	MULTICAM S3618
MAXIMUM ROUTING LENGTH	2500mm	2500mm	3600mm
MAXIMUM ROUTING WIDTH	1300mm	1800mm	1800mm
TABLE HEIGHT	950mm	950mm	950mm
GANTRY CLEARANCE	150mm	150mm	150mm
OVERALL MACHINE LENGTH	3200mm	3200mm	4300mm
OVERALL MACHINE WIDTH	1900mm	2400mm	2400mm
DRIVE SYSTEM	X and Y Rack & Pinion, Z Ball screw		
REPEATABILITY	0.025	0.025	0.025
MEMORY TYPE	Flash Ram	Flash Ram	Flash Ram
POSITIONING SPEED	Up to 30,000 mm/min		
POWER REQUIREMENTS	32 amp 3 Phase with neutral		
WARRANTY	One year. Lifetime technical support.		
Routing Lengths of up to 20,000mm and Routing Widths of up to 3000mm available.			

Specifications may vary on different models and are subject to change without notice.

## NSW OFFICE:

60 Enterprise Drive,  
Beresfield, NSW 2322  
Phone (02) 4964 1900 Fax (02) 4964 1911

## VIC OFFICE:

11/40 Ricketts Road,  
Mt Waverley, VIC 3149  
Phone (03) 9558 8022 Fax (03) 9558 8055

## QLD OFFICE:

8/42 Trade Street,  
Lytton, QLD 4178  
Phone (07) 3348 7866 Fax (07) 3348 4366

OR VISIT OUR INTERNET WEB SITE  
<http://www.multicam.com.au>



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