

Heavy Duty 4Axis CNC Router

Designed for European style furniture, (such as soffit, crown moulding, wall frame, stair jamb, column, balustrade), auto motive interior& exterior, mould, arts& crafts, chair, 3D work etc.



Size	Working Area(XY)	1600*1800; 1500*3000 or others
	Working Area(Z)	1000mm or others
Accuracy	Positioning Accuracy	±0.02/300mm
	Repeatability	±0.02/300mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	Ethernet, USB
Spindle Motor	Output	4.5kw (6HP), 18000RPM
	Collet	ER32
Table Structure	Material Hold Down	T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Ballscrew on 3 axis
	Max. Traverse Speed	45m/min
Max power consumption		4.2KW(without spindle)
Power Source		380V/3phase; 220V/3phase
Command Language		G and M code
Software		UG, AlphaCAM, Type3, Ucamcam

Light 4 Axis cnc router



ITEM	DESCRIPTION
X Y Z axis working area:	1300*2500*500mm, more size
C Aixs:	+135°
Table size:	1420*3040mm
XYZ repositioning positioning accuracy:	±0.05mm
Table surface:	Vacuum combined with T-slot
Frame:	Steel tube structure
Drive system X-Y axis:	Rack and pinion
Drive system Z axis:	Ball screw
Max power consumption:	4.2KW(without spindle)
Max working speed:	20000mm/min
Spindle speed:	0-24000rpm
Working mode:	servo
Working voltage:	AC380V (220V) 3 phase
Command language:	G code, M code
Interface:	USB, Ethernet
Operating system:	Syntec/ Siemens
Software:	UG, Alpha Cam,Type3, Ucamcam

5 Axis CNC Router



ITEM	DESCRIPTION
X,Y,Z working area	1220*2440*950mm
Table size	1320*2540mm
Spindle	10kw HSD spindle, 1000-24000rpm, liquid cool
Tool Holder	HSK63F
Motor	Yaskawa Servo motor and driver
Moving mode	Table moving
C travelling	±213°
A travelling	±135°
Beam spacing(MM)	4260
Beam Height(MM)	2150
product fixed form	T Slot Table
Tool magazine	Carrousel tool magazine (8 positions)
X, Y, Z Travelling Potioning Accuracy	±0.03/300mm
X, Y, Z Travelling Repositioning Accuracy	±0.05mm
Controller	OSAI/ Siemens
Max Rapid Travel Rate	25,000mm/min
Max working speed	15,000mm/min
Z Axis	15,000mm/min
Machine size	4260*2150*3300
Total Power(kw)	24KW
Maximum lifting weights	7.5T
Working voltage	AC380V/50Hz
Command languages	G code,M code, F/S
Option	MasterCAM, Powermill, AlphaCAM etc 5 axis software package

Linear Type ATC CNC Router



Size	Working Area(XY)	1300*2500mm;1500*3000mm or more
	Working Area(Z)	300mm or more
Accuracy	Positioning Accuracy	0.02mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	USB and Ethernet
Spindle Motor	Output	9kw , 24000RPM
	Collet	ER32, Max 20mm
Tool Change	Automatic tool changer	BT30 ISO30, 8 / 12 / 24 positions
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 Axis, Rack & Pinion on XY, Ballscrew on Z
	Max. Traverse Speed	45m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
Command Language		G and M code

Carrousel Type ATC CNC Router



Size	Working Area(XY)	1300*2500mm;1500*3000mm or more
	Working Area(Z)	300m or more
Accuracy	Positioning Accuracy	0.02mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	USB & Ethernet
Spindle Motor	Output	9kw (12HP), 24000RPM
	Collet	ER32, Max 20mm
Tool Change	Automatic tool changer	BT30 ISO30, 8 positions
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 Axis, Rack & Pinion on XY, Ballscrew on Z
	Max. Traverse Speed	45m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
Command Language		G and M code

Moving Bridge CNC Machining Center

Furniture: ideally suitable for processing cabinet door, wooden door, solid wood furniture, panel wood furniture, windows, tables and chairs, etc.

+ Well-suited for processing panel, insulating materials, plastic, epoxy resin, carbon mixed compound, etc.

+ Decoration: acrylic, PVC, density board, artificial stone, organic glass, soft metals like aluminum and copper,

+ Designed to meet diverse and complicated processing requirements, highly versatile with routing, drilling, cutting, side milling, sawing and other functions.

+ Vacuum worktable fitted with aluminum alloy bars and suction cups is rigid yet flexible for various configurations. Cropping the full sheet to your ideal size, routing, drilling, sawing, cutting, and milling—multiple functions, all in one.



Size	Working Area(XYZ)	1300x3400x350mm
	Table Size	1500*4000mm
Accuracy	Positioning Accuracy	0.05mm
	Repeatability	+/- 0.005mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	Ethernet, USB
Spindle Motor	Output	9kw (12HP), 24000RPM
	Collet	ISO30
Boring Unit		14 vertical+3 horizontal+2 sawing units/ 9 vertical+3 horizontal+2 sawing units
Table Structure	Material Hold Down	Vacuum pad clamping, moving beam
Traverse System	Traverse System	Rack and Pinion Drive, Hiwin Rail Linear Bearings on Y, Hiwin Rail Linear Bearings and Ball Screw on X and Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
Command Language		G and M code

Economical CNC Router



Size	Working Area(XY)	1300*2500mm,1500*3000mm and more
	Working Area(Z)	200mm or others
Accuracy	Positioning Accuracy	0.03mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	Stepper Motor
	Controller	Mach3 DSP remote controller
	Interface	USB
Spindle Motor	Output	3kw,4.5kw,6kw / aircooling or watercooling
	Collet	ER20/ER25
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
	ATC	Linear Type or Carrousel Type ATC
	Dust Collecting System	Dust collector + Dust collector hood
Command Language		G code & PLT

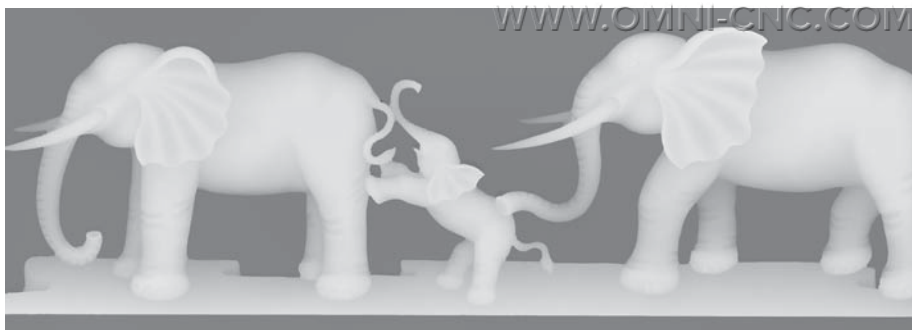
High Precision CNC Router



Size	Working Area(XY)	1300*2500mm,1500*3000mm and more
	Working Area(Z)	200mm or others
Accuracy	Positioning Accuracy	0.03mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	DSP remote controller/ NC studio
	Interface	USB
Spindle Motor	Output	9KW HSD made in Italy, aircooling, 24000rpm
	Collet	ISO30, BT30
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	45m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
	ATC	Linear Type or Carrousel Type ATC
	Dust Collecting System	Dust collector + Dust collector hood
Command Language		G code & PLT

CNC Router with 3D Scanner

The laser sensor is mounted onto the machine movement system. In the scanning mode, the machine CNC system moves the sensor line-by-line over the item prototype. The sensor measures the distance (Z coordinate) to the item surface. Data takeoff from the sensor is synchronized with the sensor movement (XY coordinates), and the result is communicated to the PC. Thus, XYZ coordinate array for the surface is formed, i.e. a digital prototype model is created which is saved as a point cloud file as well as in a common STL format suitable for subsequent use in CNC.



Size	Working Area(XY)	1300*2500mm,1500*3000mm and more
	Working Area(Z)	200mm or others
Accuracy	Positioning Accuracy	0.03mm
	Repeatability	+/- 0.05mm
Control Part	Controller	DSP remote controller(NC studio I Mach3)
	Interface	USB
Spindle Motor	Output	3KW HSD 18000rpm or others
	Collet	ER25
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Command Language		G code & PLT

4 Axis Linkage CNC Router



ITEM	DESCRIPTION
X,Y-Axis Travel:	1200mm*3000mm
Z-Axis Travel:	300mm
Spindle Power:	7.5KW air-cooling spindle, 24000rpm
Remotion:	+/- 0.05mm
Working Speed:	20m/min
Max. Rapid Travel Speed:	40m/min
Drive System X, Y and Z axis:	Ballscrew on Z, Rack& Pinion on X,Y, Linear guide on three axis.
Motor:	Servo
Standard Work Surface:	T slot table
Working Voltage :	220V, 50Hz/380V,60Hz, 3phase
Command Language:	G Code, PLT
Collet :	ER32
Rotary Device:	400mm *3000mm
Controller :	DSP; Syntec
Interface:	USB

Pneumatic Tool Change CNC Router



Size	Working Area(XY)	1300*2500mm,1500*3000mm and more
	Working Area(Z)	200mm or others
Accuracy	Positioning Accuracy	0.03mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	Stepper Motor
	Controller	DSP remote controller(NC studio I Mach3)
	Interface	USB
Spindle Motor	Output	3kw,watercooling, 24000rpm/4.5kw/6kw or others
	Collet	ER20/ER25
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
	ATC	Linear Type or Carrousel Type ATC
	Dust Collecting System	Dust collector + Dust collector hood
Command Language		G code & PLT

Synchronized Multi-Head CNC Router



Size	Working Area(XY)	1300*2500mm,1500*3000mm and more
	Working Area(Z)	200mm or others
Accuracy	Positioning Accuracy	0.03mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	Stepper Motor
	Controller	DSP remote controller(NC studio I Mach3)
	Interface	USB
Spindle Motor	Output	3kw,watercooling, 24000rpm/4.5kw/6kw or others
	Collet	ER20/ER25
Table Structure	Material Hold Down	Vacuum Combined T slot
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
	ATC	Linear Type or Carrousel Type ATC
	Dust Collecting System	Dust collector + Dust collector hood
Command Language		G code & PLT

Economical EPS CNC Router

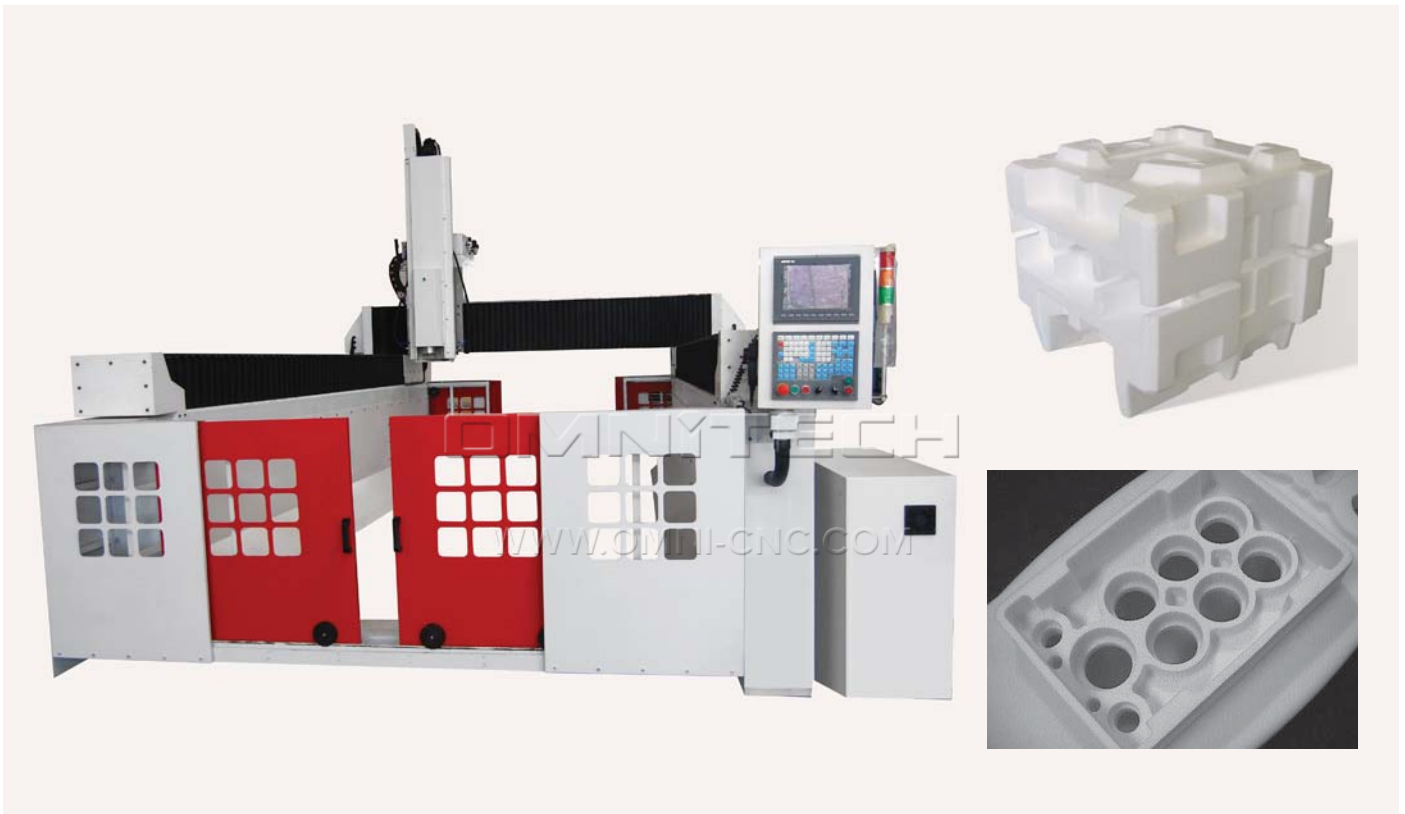
1. Four-row imported ball bearing, widened linear lead rail, self-lubricating block, all these elements caused equal force at all directions while engraving, which ensures the accuracy and strength.
2. OMNI CNC styrofoam cnc router Z axis can be heightened to 700mm-900mm, which is suitable for processing large-scale and super-thick material.
3. Intelligent processing cross-border protection.
4. Diversified control processing speed can be controlled separately, the speed of Idle running and roll setting, greatly improved the quality of processed products and processing efficiency.
5. Die and mold industries:
Sculpture various large non-metallic mold can be particularly suitable automotive foam mold, wooden ship model, wooden model aviation, trains and other wooden mold.
6. Syntec controller: PC Platform Control System; Auto File Saving Function While Power Off; Support MPG; Ethernet, USB Support.



Size	Working Area(XY)	1500*3000mm, 2000*4000mm or more
	Working Area(Z)	900mm or more
Accuracy	Positioning Accuracy	±0.09mm
	Repeatability	+/- 0.02mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	Ethernet, CF card, USB
Spindle Motor	Output	9kw (12HP), 24000RPM
	Collet	ER32, Max 20mm
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
Command Language		G and M code

Industrial EPS CNC Router

1. Four-row imported ball bearing, widened linear lead rail, self-lubricating block, all these elements caused equal force at all directions while engraving, which ensures the accuracy and strength.
2. OMNI CNC styrofoam cnc router Z axis can be heightened to 700mm-900mm, which is suitable for processing large-scale and super-thick material.
3. Intelligent processing cross-border protection.
4. Diversified control processing speed can be controlled separately, the speed of Idle running and roll setting, greatly improved the quality of processed products and processing efficiency.
5. Die and mold industries:
Sculpture various large non-metallic mold can be particularly suitable automotive foam mold, wooden ship model, wooden model aviation, trains and other wooden mold.
6. Syntec controller: PC Platform Control System; Auto File Saving Function While Power Off; Support MPG; Ethernet, USB Support.



Size	Working Area(XY)	2000*4000mm,2500*5000mm or more
	Working Area(Z)	1000mm or more
Accuracy	Positioning Accuracy	±0.1mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	AC Servo Motor
	Controller	Syntec PC platform
	Interface	Ethernet, USB
Spindle Motor	Output	9kw (12HP), 24000RPM
	Collet	ER32, Max 20mm
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	30m/min
Power Source		380V/3phase; 220V/3phase
Optional	Vacuum pump	Watering or free-oil type
Command Language		G and M code

CNC Stone Router

Application Materials :

Artificial stone, Marble, Granite, Ceramic Tile, Tombstone, milestone, Terrazzo, Limestone, Sandstone, Travertine, Quartzite, Slate, grindstone ,Jade, crystal, plexiglass, aluminum composite panel, aluminum block, copper, wood, MDF, hardwood, plywood and so on.

Application Industries :

Suitable for Curb & Paving Stone Forming industries, Stone processing factories, Tombstone processing industries, Advertisement industries for Stone art craft works, Home & Outdoor Product making industries, Architectural decoration industries i.e.

Technical Features :

- 1.The machine adopted 4.5kw water cooling spindle for quickly stone processing or spindle for fast cutting aluminum sheet.
- 2.Japan servo motor and driver ensure that with strong power for cutting and engraving various stone.
- 3.Advanced 3D carve budget and stable broken line enables carving professional speed and precision. Advanced file pretreatment function can correct the error in the files and compatible with the process codes of multiple national and international software.



Size	Working Area(XY)	1300*2500mm or others
	Working Area(Z)	320mm or others
Accuracy	Positioning Accuracy	0.05mm
	Repeatability	+/- 0.05mm
Control Part	3 Axis Control Motor	AC Servo Motor or Stepper Motor
	Controller	NC studio /DSP Handle Controller/ Syntec
	Interface	PCIMC/USB
Spindle Motor	Output	4.5 kw watercooling, 24000rpm or others
	Collet	Er25
Table Structure	Material Hold Down	Clamp
Traverse System	Traverse System	Linear Guide on 3 axis, Rack and Pinion on Y, Ballscrew on Z
	Max. Traverse Speed	32m/min
Power Source		380V/3phase; 220V/3phase
	Mist Cooling System	Cooling Nozzle and Pump
Command Language	Rotary attachment	Any size Rotary Attachment
		G code & PLT

Sign Making CNC Router

Any size of cnc router is acceptable for building. OMNI would suggest you suitable optional spare parts according to the material you process, such as rotary device for cylindrical material processing, coolant tray for metal and glass processing etc.

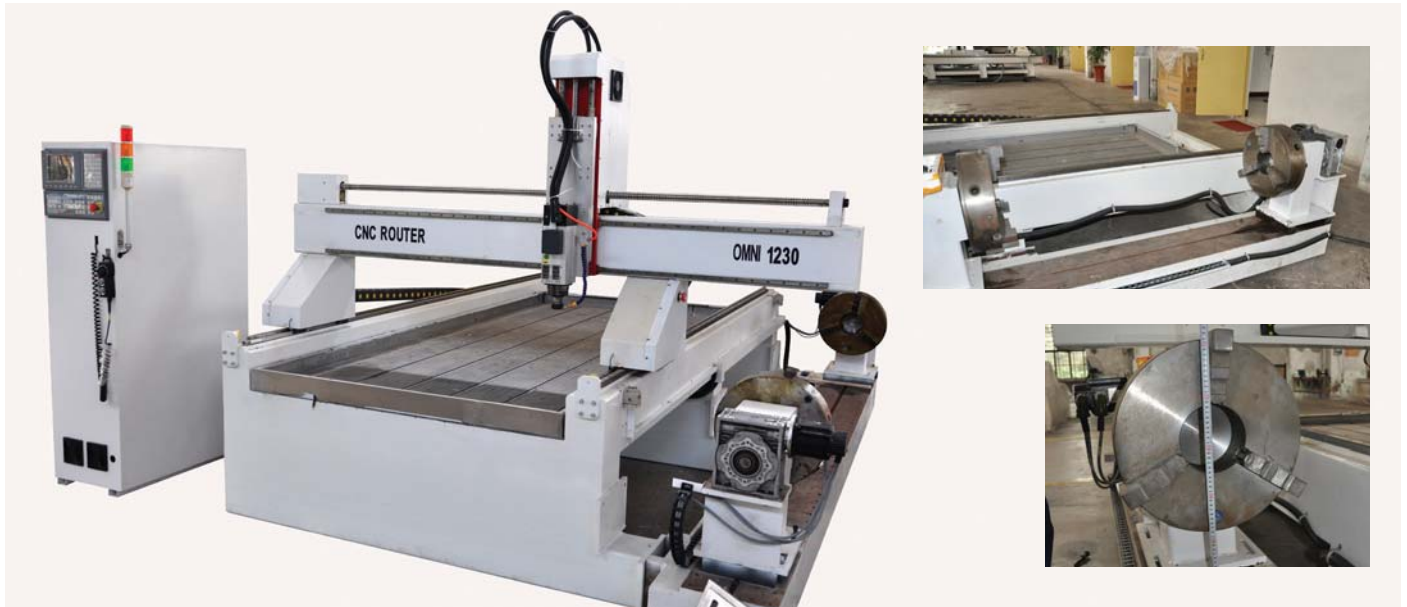
These models are with ball screw driving on 3 axis, which could cause higher precision processing result. Machines are building with heavy duty and be used in the industries of woodworking, custom millwork, fixtures, channel letters, sign making, educational, model making, prototyping, solid surface production, aerospace, foam packaging, plastic packaging equipment manufacturers, PCB fabricators, engraving, conveyor manufacturers, artistic carvings, name tags, puzzles etc.



MODEL		OR1224	OR1212	OR6090	OR4040	OR3030
Size	Working Area(XY)mm	1200*2400	1200*1200	600*900	400*400	300*300
	Working Area(Z)mm	100				50
Accuracy	Positioning Accuracy	0.01				
Control Part	3 Axis Control Motor	Stepper				
	Controller	NC studio /DSP remote controller/MACH3				
Spindle Motor	Interface	PCI/MC; USB				
	Output	2.2KW/1.5KW				0.8KW
Table Structure	Collet	ER11 or ER16				ER11
	Material Hold Down	T slot				PVC table
Traverse System	Traverse System	Round Orbit and Ball screw				
	Max. Traverse Speed	6m/min				
Power Source		220V(110V)/ single phase				
Optional	Dust collector	dust collector				N/A
Command Language		G code				
Software		Type3/ Artcam				

Custom Made CNC Router

OMNI undertakes ODM service and also could design the machine as customer's requirement and application. OMNI has rich experience of machine design and building, could offer professional suggestion according to customer's work demand. OMNI's every custom-made product enjoys high comment from customers.



You may process large diameter and long cylindrical stone with heavy duty, or large foam, or other large size mold etc.

1. This cnc router's rotary device is with double chuck at 400mm diameter, 3000mm length. Whole rotary device is with steel welded, motor we adopt big power servo motor. This rotary device configuration could meet your demand of processing heavy duty cylindrical material totally.
2. CNC router is with 500mm Z axis travelling size, could process large size mold, such as wood, foam, plastic material mold.
3. 7KW HSD spindle, such big power spindle is good at of engraving, cutting and drilling on hard material.
4. Servo system is with closed loop, ballscrew on x axis, both ensure the high precision of cnc router.
5. Control system is with windows platform, support USB port.



OMNI design multi-function cnc router, which could process cylindrical material and flat material. We place the rotary device behind the working table. And rotary device working dimension could up the whole machine working size. The working table is removable, when you process large diameter foam, taking away table could realize your demand.

All-in-One Machine Series

1. Router-Laser Combined Machine

This machine is used in advertising industry mainly. Processing material usually are PVC, acrylic, wood, marble, MDF etc. Some job requires cnc router and laser machine to process step by step, with this machine, you could pay one machine price and get double value back.



Size	Working Area(XY)	1300*2500mm
	Working Area(Z)	200mm
Accuracy	Positioning Accuracy	0.05mm
	Control Part	3 Axis Control Motor
Spindle Motor	Controller	Stepper/Servo
	Controller	NC studio & Laser Controller
Laser Power	Output	3KW
	Collet	ER20
Table Structure		80W/100W
		T slot or vacuum table
Traverse System	Traverse System	Linear guide on 3 axis, rack and pinion on x and y, ball screw on z
	Max. Traverse Speed	20m/min
Power Source		380V, 50/60HZ
	Optional	Dust collector
Command Language Software		dust collector
		G code
		Type3/ Artcam/ Corel Draw

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2. Router-Plasma Combined Machine

This machine allows you use it as cnc router and cnc plasma cutting machine. The working table is movable, and with coolant tray for cooling metal pieces. And this machine also fits rotary device for cutting metal pipes.



Size	Working Area(XY)	1300*2500mm
	Working Area(Z)	200mm
Accuracy	Positioning Accuracy	0.05mm
	Control Part	3 Axis Control Motor
Spindle Motor	Controller	Stepper
	Controller	NC studio & Plasma controller
Plasma Power	Output	3kw
	Collet	ER20
Table Structure		60A /100A/120A/200A
	Material Hold Down	T slot & Plasma Table
Traverse System	Traverse System	Linear guide on 3 axis, rack and pinion on x and y, ball screw on z
	Max. Traverse Speed	20m/min
Power Source		380V/220V 50/60HZ
	Command Language	G code
Software		Type3/ Artcam