

# CNC Milling / Routing



## RaptorX SL-Series

RaptorX-SL3200/S20  
 RaptorX-SL2200/S20  
 RaptorX-SL1200/S20



RaptorX-SL3200/S15  
 RaptorX-SL2200/S15  
 RaptorX-SL1200/S15

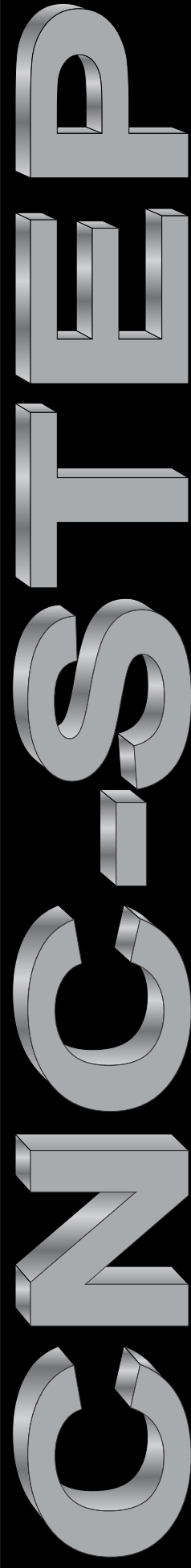


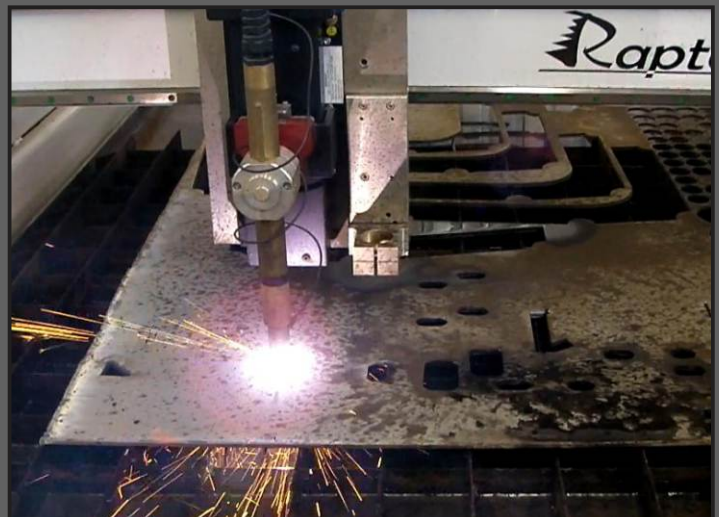
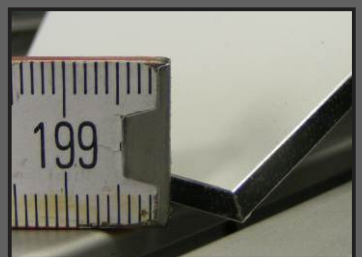
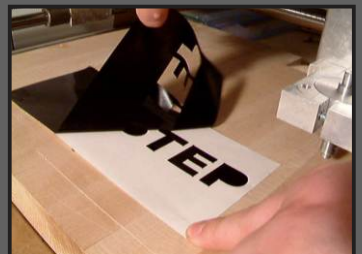
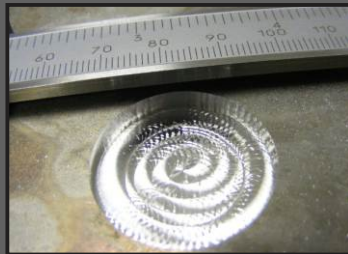
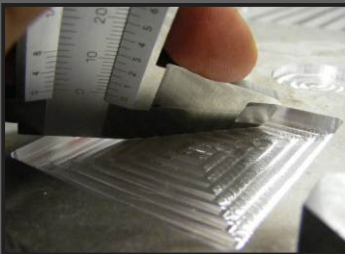
- \* Milling
- \* Routing
- \* 3D scanning
- \* Engraving
- \* Vinyl cutting

- \* Rapid Prototyping
- \* S Series instruments
- \* T Series instruments
- \* Plasma cutting
- \* CNC Welding

- \* PCB prototyping
- \* Circuit board drilling
- \* 2D and 3D work
- \* 4th axis 3D work
- \* Dispensing

Full 2D and 3D Milling!





# RaptorX SL-Series CNC Machines

Finally an end to flimsy steel machines constructed of cold drawn, paper thin square tubing which is prone to distortion when welded together. Manufactured from high quality heat-treated steel, the frame construction and 9.4 Amp Brushless drive motors that produce over 900 Ncm holding torque, provide very reliable and stable platforms that are unbeatable in their price to performance ratio. Traverse speeds of up to 40 meters per minute can be achieved. This demonstrates the high quality and performance of our machines. From us you will get carefully thought-out technology with the necessary motor control unit as well as high-quality software included in the package price. Customized machines with double Z axis etc. can be made up to a maximum 17500mm x 3010mm travel size.

## The fine distinction:

The ability to achieve maximum stability and to work with granite, marble or aluminium, at the correct table height to ensure the travel to the material surface is as small as possible for best accuracy.

## Important and distinguishing design features of the RaptorX SL steel base machine.

The application range of the RaptorX- SL CNC milling machine is extremely wide due to the adjustable work surface height (variable bridge clearance: 150mm to 600mm). The travel range of the Z Axis is 300mm as a standard order. The Z axis stability is excellent, allowing you to work as accurately on large 3D objects as one can on flat sheet materials. Use the system as a plasma cutting platform, water jet cutting platform or conventional router. All appropriate accessories are available. It is possible to work on objects up to a height of 850mm (steel cabinets etc.) or three-dimensional objects up to a height of approx. 400mm (with 400m long milling cutter). This capability is unusual for machines of this size and mould makers usually use a layered construction method to produce large 3D objects. Our new concept of working with an „invisible“ motor for the axis and the proven high performance of the entire machine, makes it a leader in the industry.

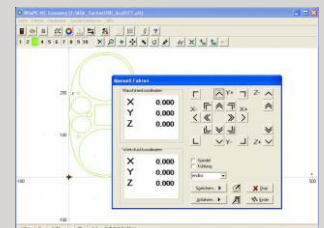
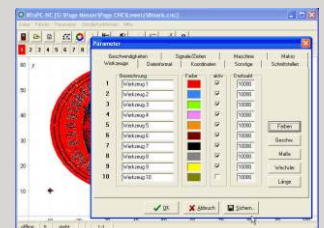
## CNC Controller Software

### MACH3

- Converts a standard PC to a fully featured, 6-axis CNC controller
- Allows direct import of DXF, BMP, JPG, and HPGL files through LazyCam
- Visual Gcode display
- Generates Gcode via LazyCam or Wizards
- Fully customizable interface
- Customizable M-Codes and Macros using VBscript

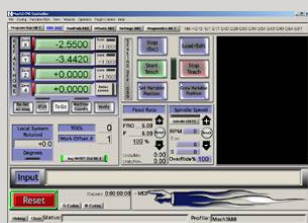
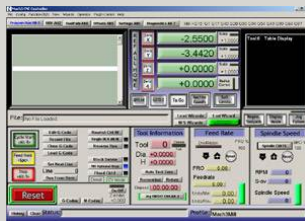
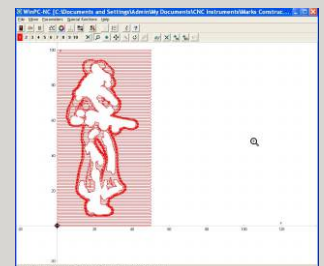
### WinPCNC Economy USB

- Full 3D capability
- HPGL/PLT
- Din/ISO G-Code
- MultiCam 2D
- MultiCam3D
- Isel NCP
- Drill 1&2
- 4th Axis enabled
- USB port communication



### WinPCNC Profi

- Full 3D and Scanning
- HPGL/PLT
- Din/ISO G-Code
- MultiCam 2D
- MultiCam3D
- Isel NCP
- Drill Sieb Meier and Exilon 1&2
- PostScript EPS & Ai
- 4th Axis enabled
- Scanning with Touch Probe
- Axis controller included
- Serial port communication



# RaptorX SL-Series Specifications

RaptorX Series	SL1200-S15	SL2200-S15	SL3200-S15	SL1200-S20	SL2200-S20	SL3200-S20
Clamping area	X-1500mm Y-1700mm	X-2500mm Y-1700 mm	X-3500mm Y-1700mm	X-1500mm Y-2200mm	X-2500mm Y-2200mm	X-3500mm Y-2200mm
X axis travel	1200 mm	2200 mm	3200 mm	1200 mm	2200 mm	3200 mm
Y axis travel	1510 mm	1510 mm	1510 mm	2010 mm	2010 mm	2010 mm
Z axis travel	300mm Standard : Optional: up to 600mm available					
Z Axis / Bridge clearance	Bottom of Bridge and Mill adaptor to Table top.Variable : 150 mm / 300 mm / 400 mm / Variable depending on Table top mounts (Optional) Materials mounted or placed on floor up to the height of 850mm (Caution: Beware of restricted travel on the X axis)					
Max. Traverse speed	40000 mm/min max. ( with WIN PCNC USB )					
Max. Working speed	20000 mm/min max. Depending on path complexity					
Step resolution X	0,0213 mm					
Step resolution Y + Z	0,0113 mm					
Revers direction devaiiton	+/- 45µm					
Repeatable accuracy	+/- 30µm					
Position error control	By calibration					
Drive motors X/Y/Z	Stepper Motor 9.4 Ampere / 930 Ncm holding Torque.					
Drive Type	Precision linear gear with 11000 Ncm Torque capability)					
Linear guides	Hiwin 20mm / 5 Guides 2 x X-Axis 1 x Y-Axis 2 x Z-Axis					
Reference swithces	Non-contact magnetic on all axis					
Work Area Monitoring	Software controlled					
Motor Stepper Controller	3 x 10 Ampere governed / Microstep / Relay Spindel/cooling Optional 4th Channel available as an add on for 4th Axis or Oscillating Knife etc.					
Power requirements	230 and 380 Volt / 50 Hz					
Milling spindle adaptor	43mm Euro Neck or adapter for HF Induction Drive spindles					
Controlling Software	Mach3, Mach3 USB, WIN PCNC Profi or WinPCNC USB					
Total Mass	+/- 780 Kg	+/- 900 Kg	+/- 1020 Kg	+/- 820 Kg	+/- 1040 Kg	+/- 1160 Kg

## RaptorX SL-Series Accessories

- Plasma Cutting systems, Hypertherm PWM 45, 65, 85 and PWM 1650
- Plasma Water Bath assembly for plasma cutting platforms
- Spindle Motors: 1Kw brushed, 1Kw induction drive and 2Kw induction drive
- Knife Holder for Vinyl cutting applications
- T-Groove Plates with multiplex under construction
- T-Groove Plate Nuts, self clamping, M6, 10 pieces per pack
- Steel Clamp with 7mm adjustment grooves for clamping materials
- Minimal Lubrication System, spray cooling device for small compressors
- Vacuum Systems for debris removal
- Engraving Depth Regulator
- Laser Scanner, Laserprobe 4200 3D flat bed scanning system.
- Tool-100 tool length sensor pad
- Oscillating Tangential Knife for foam, gasket or cardboard applications
- 4th Axis, CNC Turntable



Spray Cooling Nozzel



T-Groove Plates



Laser Scanner



Engraving Depth Regulator



Oscillating Tangential Knife



Tool Length Sensor

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