The XYZ HDs with hardened box ways for serious heavy duty metal removal.

Hardened box ways with Turcite coated slides have been the first choice for XYZ machines for many years, as they are renowned for providing the best solution for machine tool construction. The combination of machine weight and hardened box slideways guarantees a highly rigid machining platform, providing exceptional vibration damping, especially on intermittent cutting across a wide range of materials, such as Inconel, titanium, cast iron or stainless steel.

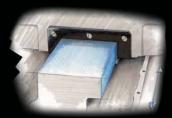






Hardened Box Way Slides

The combination of machine weight and hardened box slideways guarantees a highly rigid machining platform on the



The HD range is for get the job done. 9

Nigel Atherton

XYZ 660 HD

The top selling XYZ 660 HD is at the top of its class for power and performance.

XYZ 660 HD and 800 HD Frame

This frame design is similar on both models of HD VMCs. The only items that change are box section sizes, weight and overall size.



XYZ I I 00 HD Frame

This frame design is only available on the

XYZ I 100 HD the base casting supports the full X and Y travels allowing up to 1,500 Kg of table load which is fully supported throughout the traverse.

	XYZ 660 HD	XYZ 800 HD	XYZ I I 00 HD
X travel	660 mm	800 mm	1,100 mm
Y travel	450 mm	500 mm	610 mm
Z travel	500 mm	510 mm	610 mm
Table size	720 × 420 mm	920 × 480 mm	1,200 × 600 mm
Spindle centre to column	490 mm	550 mm	675 mm
Spindle to table	100 - 600 mm	100 - 610 mm	150 - 760 mm
Column front to table centre	290 - 740 mm	300-800 mm	360 - 970 mm
Rapid feed XYZ axis	24 M/min box way	24 M/min box way	24 M/min box way
Cutting feed rates	24 M/min	24 M/min	24 M/min
Max table load	500 kg	900 kg	1,500 kg
T slot size	16 mm	16 mm	18 mm
T slot number & pitch	4 @ 100 mm	4 @ 100 mm	4 @ 125 mm
Spindle speed	10,000 rpm	10,000 rpm	10,000 rpm
Spindle motor	28 HP / 21 kW	28 HP / 21 kW	28 HP / 21 kW
Spindle taper	BT 40	BT 40	BT 40
Tool magazine capacity	12 carousel	24 arm type	30 arm type
Tool change time tool to tool	4-5 sec	2.5 sec	2.5 sec
Max tool diameter	95 mm	78 mm	78 mm
Max tool weight	6 kg	7 kg	7 kg
Coolant capacity	130 L	150L	240L
Ballscrew size (grade C3)	32 mm PI0	40 mm PI0	40 mm PI2
AC servo motor size	X and Y 8.5Nm Z 12Nm	X and Y 8.5Nm Z 12Nm	X, Y and Z 20Nm
Machine weight	3,400 kg	4,400 kg	7,000 kg
Footprint $W \times D \times H$	2,000 × 2,100 × 2,600 mm	2,250 × 2,250 × 2,750 mm	3,100 × 2,250 × 2,820 mm





The mid range XYZ 800 HD offers great capacity and cutting performance.



The XYZ 1100 HD is a real workhorse with a solid casting and rigid box ways. A great metal remover.



SPINDLE 28 HP / 21 kW 720 x 420 mm TABLE 660 x 450 x 500 mm TRAVEL 10,000 RPM SPINDLE **SOLID CASTING 3,400 KG**

Conforming to ISO 10791	
Positional accuracy	+/- 5 microns
Repeatability	+/- 2 microns
Circularity over 300mm	8 microns
Geometric accuracy over 300mm	8 microns

Touchscreen



Touchscreen









Shown with HEIDENHAIN touchscreen control

Hardened Box Way Slides

The combination of machine weight and hardened box slideways guarantees a highly rigid machining platform on the XYZ HD range

The new XYZ 660 HD with increased travels in X &Y of 660 mm and 450 mm.

With a small footprint of just $2,000 \times 2,100 \times 2,600$ mm this VMC will give modern day production capabilities to most shopfloors, with room to spare! The XYZ 660 HD is the smallest HD VMC in our range with a solid ribbed casting, wide box slideways and powerful direct drives on all three axes. The XYZ 660 HD features an automatic 12 station toolchanger and can accommodate most components with travels of 660 mm x 450 mm x 500 mm.

Standard Equipment

Siemens 828D ShopMill Touchscreen Control or Heidenhain TNC 620 Touchscreen Control. Optimised Digital Servo's. Hardened Table. Rigid Tapping. **High Pressure Flood Coolant.** Coolant Washdown. LED Worklight. 12 Station Tool Changer. Remote Electronic Handwheel. Easy Clean Swarf Tray. Steel Concertina Guards on all Axes. Stainless Steel Floor Pan. **Powder Coated Guarding. Pull Studs.** Networking. USB Port.

Optional Equipment 4th Axis Rotary Table.

5th Axis Rotary Table. Swarf Conveyor & Bin. 12,000 rpm Spindle. Through Spindle Coolant. Offline Programming. Renishaw/Heidenhain Toolsetting and Probing. Contour Handwheel (wind the handwheel to run through the program). Oil Skimmer. **Advanced Swarf Management** System. **DXF** Reader.

	XYZ 660 HD
X travel	660 mm
Y travel	450 mm
Z travel	500 mm
Table size	720 × 420 mm
Spindle centre to column	490 mm
Spindle to table	100 - 600 mm
Column front to table centre	290 - 740 mm
Rapid feed XYZ axis	24 M/min box way
Cutting feed rates	24 M/min
Max table load	500 kg
T slot size	16 mm
T slot number & pitch	4 @ 100 mm
Spindle speed	10,000 rpm (12,000 optional)
Spindle motor	28 HP / 21 kW
Spindle taper	BT 40
Tool magazine capacity	12 carousel
Tool change time tool to tool	4-5 sec
Max tool diameter	95 mm
Max tool weight	6 kg
Coolant capacity	130 L
Ballscrew size (grade C3)	32 mm P10
AC servo motor size	X and Y 8.5Nm Z 12Nm
Machine weight	3,400 kg
Footprint $W \times D \times H$	2,000 × 2,100 × 2,600 mm



SPINDLE 28 HP / 21 kW 920 x 480 mm TABLE 800 x 500 x 510 mm TRAVEL 10,000 RPM SPINDLE SOLID CASTING 4,400 KG

Conforming to ISO 10791	
Positional accuracy	+/- 5 microns
Repeatability	+/- 2 microns
Circularity over 300mm	8 microns
Geometric accuracy over 300mm	8 microns

SIEMENS Touchsereen HEIDENHAIN HEAVY DUTY	20		
XYZ 800 HD		YYZ Hadisa Toda	

The new XYZ 800 HD with increased travels in X &Y of 800 mm and 500 mm.

The **XYZ 800 HD** is a compact, highly capable and popular machine. With its solid cast ribbed structure, 24-station arm-type toolchanger, and vibration absorbing box slideways it is a rigid machine ideal for the typical sub-contractor who doesn't know day-to-day.

The XYZ 800 HD can cut even the toughest materials faster than most other competitor VMCs.

Standard Equipment

Siemens 828D ShopMill Touchscreen Control or Heidenhain **TNC 620 Touchscreen Control.** Optimised Digital Servo's. Hardened Table. Rigid Tapping. High Pressure Flood Coolant. Coolant Washdown. LED Worklight. 24 Station Arm Type Tool Changer. Remote Electronic Handwheel. Easy Clean Swarf Tray. Steel Concertina Guards on all Axes. Stainless Steel Floor Pan. **Powder Coated Guarding.** Pull Studs. Networking. **USB Port.**

Optional Equipment

DXF Reader.

4th Axis Rotary Table.
5th Axis Rotary Table.
Swarf Conveyor & Bin.
12,000 rpm Spindle.
Through Spindle Coolant.
Offline Programming.
Renishaw/Heidenhain Toolsetting and Probing.
Contour Handwheel
(wind the handwheel to run through the program).
Oil Skimmer.
Advanced Swarf Management
System.

	XYZ 800 HD
X travel	800 mm
Y travel	500 mm
Z travel	510 mm
Table size	920 × 480 mm
Spindle centre to column	550 mm
Spindle to table	100 - 610 mm
Column front to table centre	300 - 800 mm
Rapid feed XYZ axis	24 M/min box way
Cutting feed rates	24 M/min
Max table load	900 kg
T slot size	16 mm
T slot number & pitch	4 @ 100 mm
Spindle speed	10,000 rpm (12,000 optional)
Spindle motor	28 HP / 21 kW
Spindle taper	BT 40
Tool magazine capacity	24 arm type
Tool change time tool to tool	2·5 sec
Max tool diameter	78 mm
Max tool weight	7 kg
Coolant capacity	150L
Ballscrew size (grade C3)	40 mm PI0
AC servo motor size	X and Y 8.5Nm Z 12Nm
Machine weight	4,400 kg
Footprint $W \times D \times H$	2,250 × 2,250 × 2,750 mm

Hardened Box Way Slides

The combination of machine weight and hardened box slideways guarantees a highly rigid machining platform on the XYZ HD range

Shown with SIEMENS control

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SPINDLE 28 HP / 21 kW 1,200 x 600 mm TABLE 1,100 x 610 x 610 mm TRAVEL 10,000 RPM SPINDLE SOLID CASTING 7,000 KG

Conforming to ISO 10791	
Positional accuracy	+/- 5 microns
Repeatability	+/- 2 microns
Circularity over 300mm	8 microns
Geometric accuracy over 300mm	8 microns

SIEMENS Touchscreen HEIDENHAIN



Hardened Box Way Slides

The combination of machine weight and hardened box slideways guarantees a highly rigid machining platform on the XYZ HD range

The new XYZ 1100 HD with increased travels in X &Y of 1100 mm and 610mm.

This completely new structure has a newly designed base that allows for better support of the X and Y travel and increases table load capacity from 800 kg to a massive 1,500 kg. There is never any table overhang and the table is always fully supported. Built on a solid Meehanite, computer modelled, ribbed casting with induction hardened, ground and Turcite-B coated slides gives the XYZ 1100 HD superb vibration absorption and rigidity. The optimised digital servo motors and automatic lubrication of the slides and ballscrews also ensures maximum rapid traverse rates. Performance has been proven in some of the toughest machine shop environments to reassure customers that an XYZ machining centre is a true workhorse that you can depend on for many years of reliable and accurate operation.

Standard Equipment

Siemens 828D ShopMill Touchscreen Control or Heidenhain TNC 620 Touchscreen Control. **Optimised Digital Servo's.** Hardened Table. Rigid Tapping. Twin Swarf Augers. Swarf Conveyor & Bin from Auger. **High Pressure Flood Coolant.** Coolant Washdown. LED Worklight. 30 Station Arm Type Tool Changer. **Pneumatically Counter Balanced** Remote Electronic Handwheel. Easy Clean Swarf Tray. Steel Concertina Guards on all Axes. Stainless Steel Floor Pan.

Optional Equipment

Powder Coated Guarding.

Pull Studs.
Networking.
USB Port.

DXF Reader.

4th Axis Rotary Table.
5th Axis Rotary Table.
12,000 rpm Spindle.
17hrough Spindle Coolant.
Offline Programming.
Renishaw/Heidenhain Toolsetting and Probing.
Contour Handwheel (wind the handwheel to run through the program).
Oil Skimmer.
Advanced Swarf Management System.

	XYZ 1100 HD
X travel	1,100 mm
Y travel	610 mm
Z travel	610 mm
Table size	1,200 × 600 mm
Spindle centre to column	675 mm
Spindle to table	150 - 760 mm
Column front to table centre	360 - 970 mm
Rapid feed XYZ axis	24 M/min box way
Cutting feed rates	24 M/min
Max table load	1,500 kg
T slot size	18 mm
T slot number & pitch	4 @ 125 mm
Spindle speed	10,000 rpm (12,000 optional)
Spindle motor	28 HP / 21 kW
Spindle taper	BT 40
Tool magazine capacity	30 arm type
Tool change time tool to tool	2 sec.
Max tool diameter	78 mm
Max tool weight	7 kg
Coolant capacity	240L
Ballscrew size (grade C3)	40 mm PI2
AC servo motor size	X, Y and Z 20Nm
Machine weight	7,000 kg
Footprint W×D×H	3,100 × 2,250 × 2,820 mm

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