

ACRA.

CNC HIGH SPEED MACHINE CENTER

High precision , High Efficiency , High Quality



High Speed Series

AHQ-850L / AHQ-1020L



● AHQ-850L / AHQ-1020L

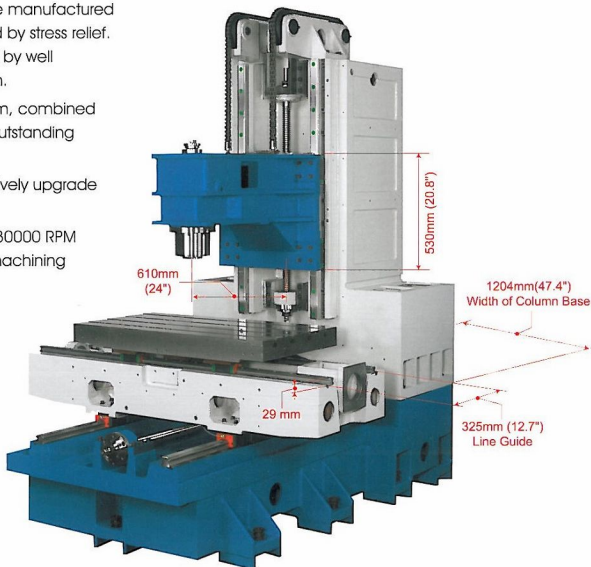


THE LEADER IN QUALITY AND RELIABILITY
~SINCE 1973~

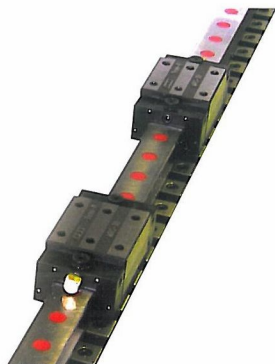
PERFECTLY DESIGNED MACHINE STRUCTURE

High Rigidity! Permanent Stability!

- The structural parts of the machine are manufactured from Meehanite cast iron, and treated by stress relief. The structural parts are also reinforced by well designed ribs to minimize deformation.
- Increased width on the column bottom, combined with box-type construction, provides outstanding stability during high speed cutting.
- High precision linear guideways effectively upgrade machine stability.
- Choice of 16000, 20000, 24000 and 30000 RPM high speed spindles to meet built-in machining applications.
- High precision class C3 ball screws minimize vibration while assuring high machining accuracy.
- Widened column bottom and base provide superior stability when performing high speed cutting.

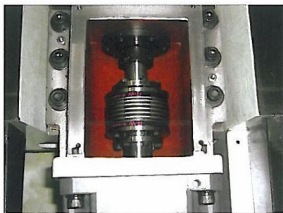


● AHQ-850L / AHQ-1020L



Linear Guideways

The Y, Z-axes are equipped with 45 mm. Wide roller-type linear ways. The Z-axis employs a 35mm. Wide roller-type linear guideway.



Direct Drive by Servomotor

The ball screws on 3 axes are directly driven by servomotors through backlash-free couplings. This feature assures maximum dependability of positioning accuracy. High precision class C3 ball screws on 3 axes are pre-tensioned to avoid thermal deformation.



Carousel-Type Tool Magazine

The carousel-type magazine is standard equipment. Its loading capacity is 16 tools making it suitable for flexible machining applications. Fixed-type tool selection provides quick tool change, and reduces non-cutting time.

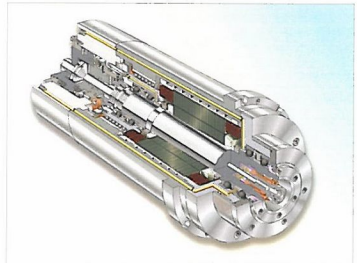
YOUR COMPETITIVE EDGE FOR PRECISION PARTS, MOLDS AND 3C PARTS MACHINING!

Today all enterprises are facing more serious competition than ever before, and the only ways to stay competitive are pursuing higher efficiency and higher quality. The high speed machining center is designed with high speed, high efficiency and high accuracy in mind. The series of machining centers employ a high speed spindle, combined with linear guideways on 3 axes, and an exceptionally stable and rigid structure. When it comes to precision parts machining, mold machining and 3C parts machining, New high speed VMC is your No.1 choice.



Ordering Guide For Built-in Type Spindles

- TH-170.2 16,000 RPM BT-40 (std.)
- TH-170.2 20,000 RPM BT-40 (opt.)
- TH-170.2 20,000 RPM HSK-A63 (std.)
- TH-170.2 24,000 RPM HSK-A63 (opt.)
- TH-150.2 30,000 RPM HSK-E50 (opt.)



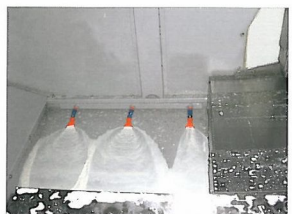
Arm-Type Tool Magazine (Opt.)

The arm-type magazine is driven by a cam mechanism, featuring quick and stable tool change. The magazine provides loading capacity of 20 and 24 tools to choose from. Tool selection method is bi-directional and random.



Coolant Jets Around Spindle (Opt.)

The coolant jets around the spindle are available only for models with arm-type ATC. This device is used for removing chips on the work piece, and increases cooling efficiency of the workpiece.



Chip Flushing Device (Opt.)

There are each 3 coolant nozzles provided at both sides of table. Their high pressure flushing performance efficiently removes chips from both sides of the table.

MODEL	Unit	AHQ-850L			AHQ-1020L		
3 AXES TRAVEL							
X axis travel	mm	850			1020		
Y axis travel	mm	550			550		
Z axis travel	mm	580			580		
Distance from table surface to spindle nose	mm	120 - 700			120 - 700		
TABLE							
Table area	mm	1020 x 550			1200 x 550		
Max. load of table	kgs	700			800		
T-slot	mm	4 x 18 x 125			4 x 18 x 125		
SPINDLE		Standard speed 16000 RPM					
Spindle taper	type	BT-40	HSK - 63	HSK - E50	BT-40	HSK - 63	HSK - E50
Spindle speed	rpm	16000	20000, 24000	30000	16000	20000, 24000	30000
Spindle drive	type	Built in			Built in		
Spindle motor	kw	18 / 23	18 / 23	15 / 17	18 / 23	18 / 23	15 / 17
Spindle cooling	type	Oil-Air (std.)			Oil-Air (std.)		
FEED RATE							
Rapid traverse (X,Y)	m/min	30			30		
Rapid traverse (Z)	m/min	30			30		
Cutting feed rate	mm/min	1-15000			1-15000		
3 Axes motor output (X,Y,Z)	kw	3 / 3 / 4			3 / 3 / 4		
A.T.C.							
Magazine type	type	Carousel	Arm		Carousel	Arm	
Tool magazine capacity	pcs	16	24		16	24	
Max. tool diameter	mm	100 / 150	80 / 150		100 / 150	80 / 150	
Max. tool length	mm	250	250		250	250	
Max. tool weight	kgs	7	7		7	7	
Tool selection	type	Fixed-type	Random		Fixed-type	Random	
OTHER							
Power consumption	KVA	20			20		
Floor space (LxWxH)	mm	2650 x 2180 x 2350			2940 x 2180 x 2350		
Machine weight	kgs	6500			7000		

Standard Accessories

- Fully-enclosed splash guard.
- Cooling system.
- Heat exchanger for electrical cabinet.
- Spindle oil cooler.
- Automatic power off.
- Automatic lubrication system.
- Air blast through spindle.
- Working lamp.
- Tool box.
- Carousel-type ATC. (16 tools)
- Rigid tapping.
- Operation manual and electric drawing.
- RS-232 Interface.
- Screw type chip conveyor.

Optional Accessories

- Built-in type spindle 16000, 20000, 24000 and 30000 RPM.
- Rotary table (4th axis: incl. manual tailstock, oil tank, motor and driver)
- Oil tank for 4th axis.
- Motor and driver for 4th axis.
- Arm-type ATC 24 tools.
- Oil fluid separator.
- Coolant gun motor for rear flushing.
- Link chain-type chip conveyor.
- Coolant through tool holder.
- Coolant jets around spindle. (Arm type ATC only)
- Linear scales on 3 axes.
- Coolant through spindle with filter.
- Deep hold drilling stopper.
- Automatic tool length measurement system.
- Chip flushing device.



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