



HIGH SPEED VMC SERIES

AHSM-1000/1000L



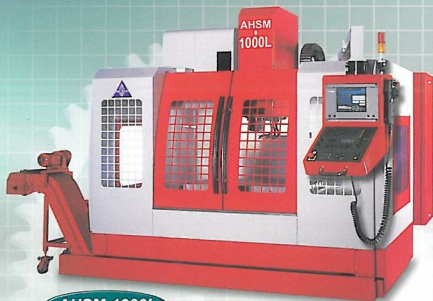
BT-40 SPEED-800/1500 UP TO 38000 RPM
THE LEADER IN QUALITY AND RELIABILITY



ACRA

AHSM SERIES FEATURES:

- HIGH SPEED CUTTING, SAVE UP TO 60% TIME.
- HIGH VOLUME HARD DISK DRIVE, UP TO 6 GB.
- HIGH END CNC CONTROLS, UP TO DUAL CPU, WINDOWS NT, TOUCH SCREEN.
- HIGH SPEED BLOCK READING, UP TO 1000 BLOCK/SEC.
- HIGH SPEED LOOK AHEAD, UP TO 1024 BLOCKS.



AHSM-1000L

EXTREMELY RIGID CASTING FRAME W/O DEFORMATION

- HIGH QUALITY MEEHANITE CASTINGS WITHOUT DEFORMATION.
- HIGH QUALITY SPINDLE DESIGN WITH SUPER LOW VIBRATION.
- HIGH SPINDLE SPEED, UP TO 38000 RPM.
- HIGH RAPID FEEDRATE, UP TO 30 METER PER MINUTE.
- HIGH END LATEST TECHNOLOGY LINEAR SLIDEWAYS WITH AROUND 10 CC YEARLY OIL CONSUMPTION, MAXIMUM 18000KM TRAVELLING DISTANCE.



AHSM SERIES HIGH SPEED VERTICAL MACHINING CENTERS:

MODEL	UNIT	AHSM-1000	AHSM-1000L
TABLE:	OVERALL SIZE	MM(INCH) 1070x500(42x19.6)	1200x610(47.2x24.2)
	WORKING AREA	MM(INCH) 1070x500(42x19.6)	1200x610(47.2x24.2)
	T SLOTS (SIZE x NO x PITCH)	MM(INCH) 18x5x100(11/16x5x4)	18x6x100(11/16x6x4)
TRAVEL:	MAXIMUM LOADING	KG(LBS) 500 (1102)	850 (1873)
	X / Y / Z AXIS	MM(INCH) 1020/510/510(40/20/20)	1020/610/610(40/24/24)
DISTANCES:	SPINDLE TO COLUMN WAYS	MM(INCH) 550(21.6)	645(25.3)
	SPINDLE TO TABLE TOP	MM(INCH) 110-720(4.3-28.3)	150-750(5.9-29.5)
	FLOOR TO TABLE TOP	MM(INCH) 810(31.8)	820(32.2)
SPINDLE:	TAPER	BT#	40
	SPEED	RPM	8000
	FRONT BEARING DIAMETER	MM(INCH) 70(2.7)	70(2.7)
	MOTOR	RPM	7.5
AXIS MOTORS: X & Y / Z	HEDENHAIN / SIEMENS / SELCA	KW	14
	CUTTING FEED RATE	NM	1-7000
RAPID FEEDRATE X / Y / Z	WITH EUROPEAN CONTROL	MM / MIN	30/30/24
	MINIMUM SETTING	M / MIN	0.001(0.00004)
AUTOMATIC TOOL CHNGER:	TYPE OF ATC	MM(INCH)	SWING
	NO. OF ATC	TOOLS	24
	MAX. TOOL (DIA / LENGTH)	MM(INCH)	150/300(5.9/11.8)
	MAX. TOOL WEIGHT	KG(LBS)	7(15)
	TOOL TO TOOL	SEC.	3
	CHIP TO CHIP	SEC.	10
BALLSCREWS ON 3 AXIS:	DIA. X PITCH (X/Y AXIS)	MM x MM	40x16(1-1/2x5/8)
	DIA. X PITCH (Z AXIS)	MM x MM	50x12(2x1/2)
	PRECISION CLASS	C3, MM/300MM	0.008
	COOLANT MOTOR POWER	KW	0.86
COOLANT & LUBRICATION:	COOLANT TANK VOLUME	L	120
	COOLANT MOTOR CAPACITY	L/MIN	20
	LUBRICATION MOTOR POWER	WATT	25
	LUBRICATION TANK VOLUME	L	2
ACCURACY:	POSITIONING	MM(INCH)	JIS 6338--0.005/300(-0.0002/11.8) VID 3441-P0.014(0.0005)
	REPEATABILITY	MM(INCH)	JIS 6338--0.003(-0.0001) VID 3441-P0.014(0.0005)
	ROUNDNESS	MM(INCH)	JIS 6338--0.01/300(-0.0004/11.8)
MISCELLANEOUS:	MACHINE NET WEIGHT	KG(LBS)	5500(12122)
	POWER REQUIRED	KVA	20
	PNEUMATIC REQUIRED	KG/CM²	7

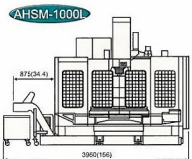
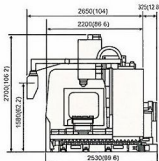
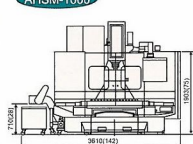
STANDARD FEATURES & ACCESSORIES

- FULL SPLASH GUARD.
- PROGRAMMABLE COOLANT SYSTEM.
- AUTOMATIC LUBRICATION SYSTEM.
- SPINDLE AIR BLAST SYSTEM.
- WORKING LAMP.
- ALARM LAMP FOR ABNORMAL SITUATION.
- INDICATION LAMP FOR DWELL & END OF JOB.
- LEVELLING BOLTS & PADS.
- RS-232 TERMINAL INTERFACE PORT.
- MACHINE & CONTROL MANUALS.
- TOOLBOX WITH SPANNERS & WRENCHES.
- SPINDLE OIL COOLER DEVICE.

MACHINES DIMENSIONS

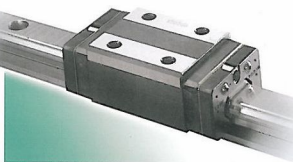
UNIT:MM(INCH)

AHSM-1000



SUPERIOR DESIGNED FEATURES FOR HIGH SPEED: **ACRA**

SUPERIOR DESIGNED FEATURES FOR HIGH SPEED:



● SUPERIOR SPINDLE DESIGN MINIMIZES THERMAL DISTORTION WITH CHILLED OIL CIRCULATING UP TO BEARINGS' OUTER RINGS & FRONT NOSE AREA; 4 PCS 70 MM DIAMETER P4 HIGH PRECISION BEARINGS, BT#40 OR CAT#40 OR ISO 40 DIN 69871 TOOL HOLDER, 1200KG CLAMPING FORCE, STANDARD 8000 RPM.

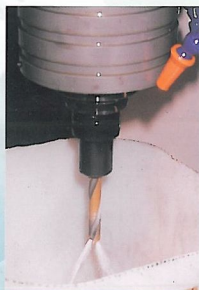
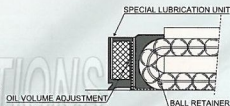
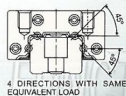
● THE UNIQUE CAM MECHANISM TO TRIGGER OFF THE TOOL UNCLAMPING AND EXCHANGING AT ONE MOMENT, WITHOUT ANY SIGNAL WAITING TIME; FAST AND RELIABLE.

● MAXIMUM TOOL DIMENSION-150MM DIAMETER (WITH NO ADJACENT TOOL), 300MM LENGTH AND 7 KG WEIGHT; STANDARD 24 STATIONS, OPTIONAL CAN BE 32 OR 40 STATIONS.

● LINEAR GUIDES

THE LATEST TECHNOLOGY HEAVY DUTY LINEAR BEARINGS OFFER MAXIMUM 18000KM TRAVELLING WORKING DISTANCE DUE TO THE LATEST DESIGN OF BALL RETAINER, RESULTS MUCH LESS NOISE AND MUCH LONGER LIFE. OIL CONSUMPTION THANKS TO THE LATEST DESIGN OF SPECIAL LUBRICATION UNIT ON THE SLIDING UNIT, CONSUMES AROUND 10 CC OIL PER YEAR.

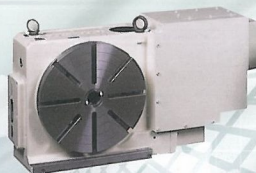
OPTIONAL ACCESSORIES & FUNCTIONS



1. COOLANT THRU SPINDLE DEVICE.



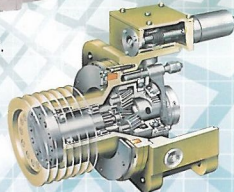
2. GRAPHITE CUTTING WATER CURTAIN DEVICE.



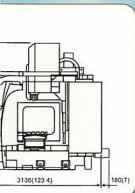
3. CNC ROTARY TABLE.



5. BT#40 FAST ATC 1.5 SECOND.



4. PLANETARY GEARBOX HEAD.



6. AUTOMATIC TOOL LENGTH & RADIUS MEASUREMENT (RENISHAW TS-27R)



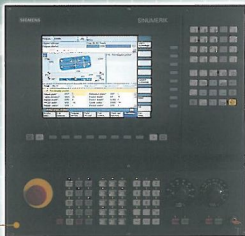
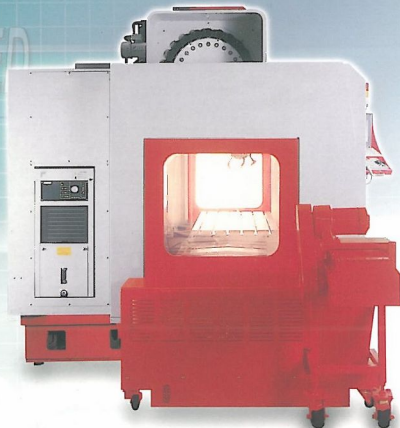
7. WORKPIECE PROBE (RENISHAW MP-10/12)

ACRA. FACT DESIGNED

COMPACT DESIGNED:

AN OPTIONAL ADDITIONAL CHIP CONVEYOR IS AVAILABLE. THE CUTTING CHIPS ARE COOLED BY COOLANT AND EJECTED QUICKLY BY WAY OF THE CHIP CONVEYOR. ALL MAINTENANCE PARTS ARE CONVENIENTLY LOCATED AT THE BACK OF THE MACHINE.

PHOTO SHOWN 3 COOLANT PUMPS HAVE BEEN WELL COVERED & PROTECTED.



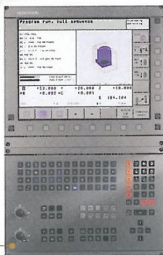
• **SIEMENS** 840D

• **DIGITAL LATEST CNC CONTROL**

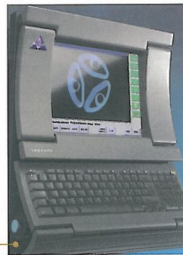
WITH HIGH RATE DATA TRANSMISSION, ADVANCED PREVIEW & PRECISION CONTOURING CONTROL. PLUS DIGITAL DRIVE AND QUICK SPINDLE & SERVO ACCELERATION / DECELERATION.



• **FANUC** 16i/18i



• **HEIDENHAIN** i530



• **SELCA** S4045D/PD

• **HIGH SPEED MACHINING**

HSC (HIGH SPEED CUTTING) IS NOT ONLY FOR SPEED, BUT WIDELY APPLIED IN MOULD & DIE INDUSTRIES AND AEROSPACE TO REDUCE CYCLE TIME, IMPROVE SURFACE AND INCREASE TOOL LIFE; FOLLOWINGS ARE THE BASIC REQUIREMENTS:



• **DIRECT DRIVE SPINDLE**

REMOVE ANY BACKLASH, AND ENSURE THE BEST PERFORMANCE ON FINAL SURFACE FINISHING.



• **MOTOR SPINDLE**

VARIOUS BUILT-IN HIGH FREQUENCY MOTOR SPINDLES GUARANTEE MINIMUM VIBRATIONS AND BEST FINAL PERFORMANCE; CHOICES:
TOOL HOLDER: ISO 30/40 TO HSK-E40/A63
MOTOR POWER: 7.6 KW TO 21 KW
SPEED RPM: 15000 RPM TO 38000 RPM



FREJOTH INTERNATIONAL LTD.

8F #501, SEC.2, WU CHUAN W. RD., TAICHUNG 408, TAIWAN, R.O.C.

TEL: 886-4-23816977 FAX: 886-4-23813584. 23813769

E-mail: frejoth@tcts.seed.net.tw

web-site <http://www.acra.com.tw>