

- Vertical Machining Center
- Horizontal Machining Center
- Horizontal Turning Center
- Vertical Turning Center

Production Solutions Machining Range

Imported Div.

COSMOS Machine Tool Solutions



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AKIRA-SEIKI®

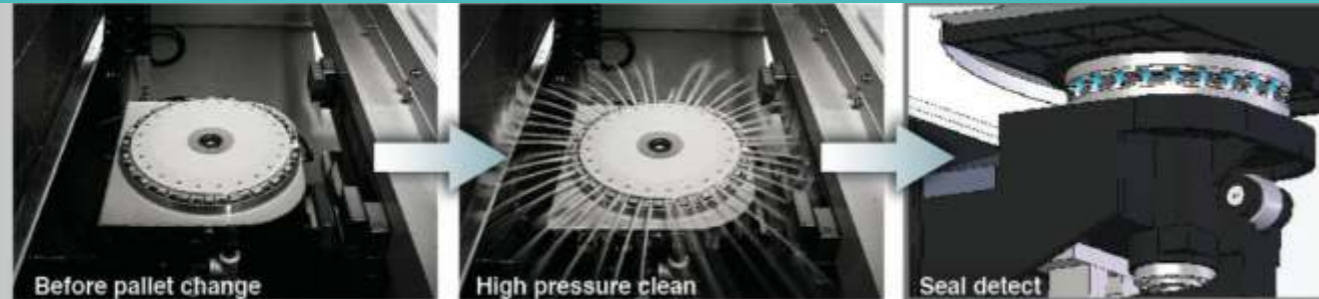
Super High Speed DTC with Pallet Changer
RMV Series
 Akira Seiki, Taiwan

Table Size

- 500 x 300 to 700 x 400 mm
- 72 M/Min Rapid Z Axis
- 15000 Rpm spindle
- 24 Teeth APC Location
- Bt40 Spindle Available

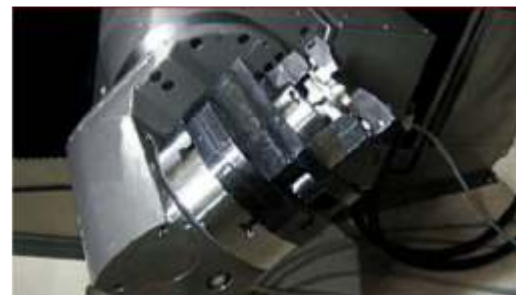


Optimum Chip Proof and Immediate Detect!-AKIRA A⁺ Guarder



AKIRA-SEIKI RMV-APC models AKIRA A⁺ Guarder design double protection for high volume machining stability. Gap between locating taper. The active strong pressure clean and immediate detect absolutely ensure light chip-stuck concern.

Also available with 4th & 5th Axis



Advance optimum machine tool for multi-faces productive jobs with high accuracy required and save cost.



High efficient tilting rotary table completes all the processing in one catch-up. Free-interference or various fixture application and easier.



Table indexing angle
 B-axis: **+30° ~-120°**
 C-axis: **360°**

MODEL	UNIT	RMV-160RT	RMV-250RT	RMV-500 APC	RMV-700 APC
TRAVEL					
X axis travel	mm	380	500	500	700
Y axis travel	mm	160	250	300	400
Z axis travel	mm	380	400	280	400
Rapid Rate of X/Y/Z	m/min	60 / 60 / 72	48 / 60 / 72	60 / 60 / 72	
Working surface (W x L)	mm	Dia. 160	Dia. 250	500 x 300	700 x 400
Table loading capacity	KG	30	60	100	160
Max spindle speed	RPM	15000 (24000)	12000 (15000)	15000 (24000)	12000 (15000)
Spindle motor	KW	6	12	6	12
Type of tool shank		BT 30	BT 40	BT 30	BT 40
Tool storage capacity	EA	24	24/40	24	24
Floor space (Length x Width)	mm	1600 x 2322	1900 x 2677	1500 x 2780	1900 x 3150

Standard Features

- Linear Guide Way On All 3 Axis
- Spindle Air Chilling
- Spindle Taper Air Blow
- Coolant Flush System Next To Spindle Nose
- Automatic Pallet Exchange, Precise Location By Big Scale Teeth Coupling
- Akira Seiki Patented Air Ring With Detective System Under Pallet
- Servo Tool Magazine
- Full Enclosure Splash guard (Adopt Non-Toxicant Painting)
- Top Cover
- Washing Gun
- M07 Air Blow For Workpiece
- M30 Auto Power Off
- User Friendly Operation Manual
- Remote Control Mpg
- Coolant Flushing Ring Under Pallet (Standard For Rmv500Apc And Rmv700Apc)
- Automatic Lubrication Unit
- Operation Status Lights (3 Colors Led Light)
- Heat Exchanger For Electrical Cabinet
- Coolant Tank With 2 High Pressure Pump
- Machine & Control Operation Manuals
- 1 Year Warrantee For Machine
- 2 Years Warrantee For Controller



AKIRA-SEIKI®

Drill Tap Center PC Series Akira Seiki, Taiwan

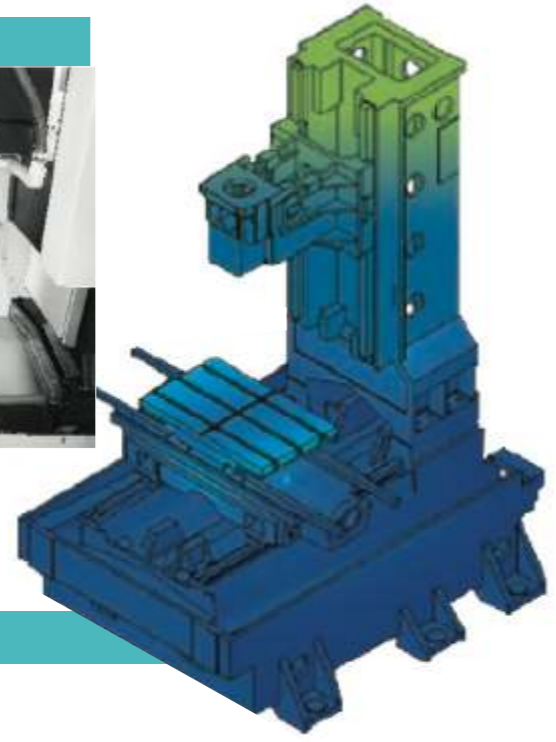
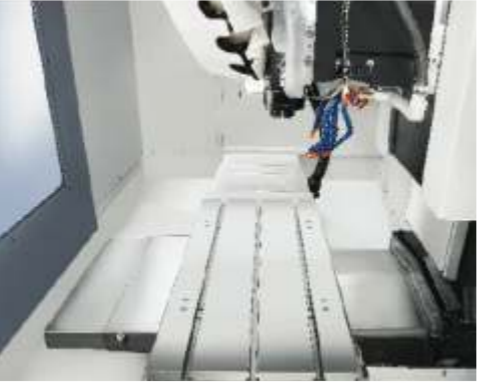
Travel Ranges

- 460 x 320 to 700 x 400 mm
- 21 Tool Servo ATC
- 1.2G Max. Acceleration / Deceleration
- 60 M/Min High Speed
- 84 Nm High Torque*Minimum footprint



High speed & reliable servo magazine

Flexible working area

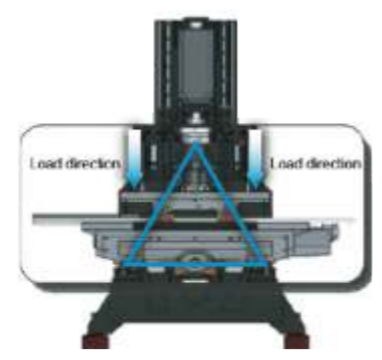
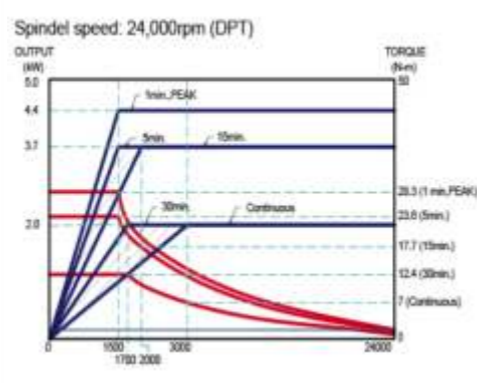
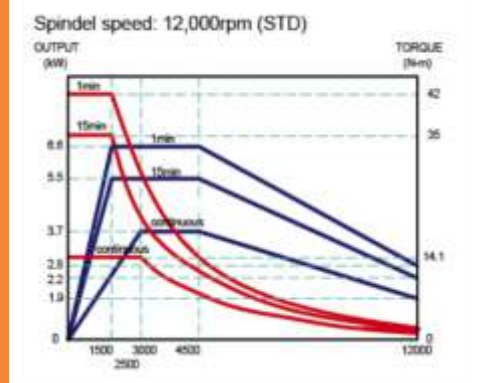


Robust structure

MODEL	UNIT	PC-500	PC-700
TRAVEL			
X axis travel	mm	500	700
Y axis travel	mm	400	400
Z axis travel	mm	330	330
Rapid Rate of X/Y/Z	m/min	60 / 60 / 60	
Acceleration	G	1.2	
Working table (W x L)	mm	650 x 400	850 x 400
Table loading capacity	KG	300	300
Max spindle speed	RPM	12000 (24000)	
Spindle motor	kW	9	
Type of tool shank		BT 30	
Tool storage capacity	EA	21	
Floor space (W x L)	mm	1560 x 2530	2100 x 2530

Standard Features

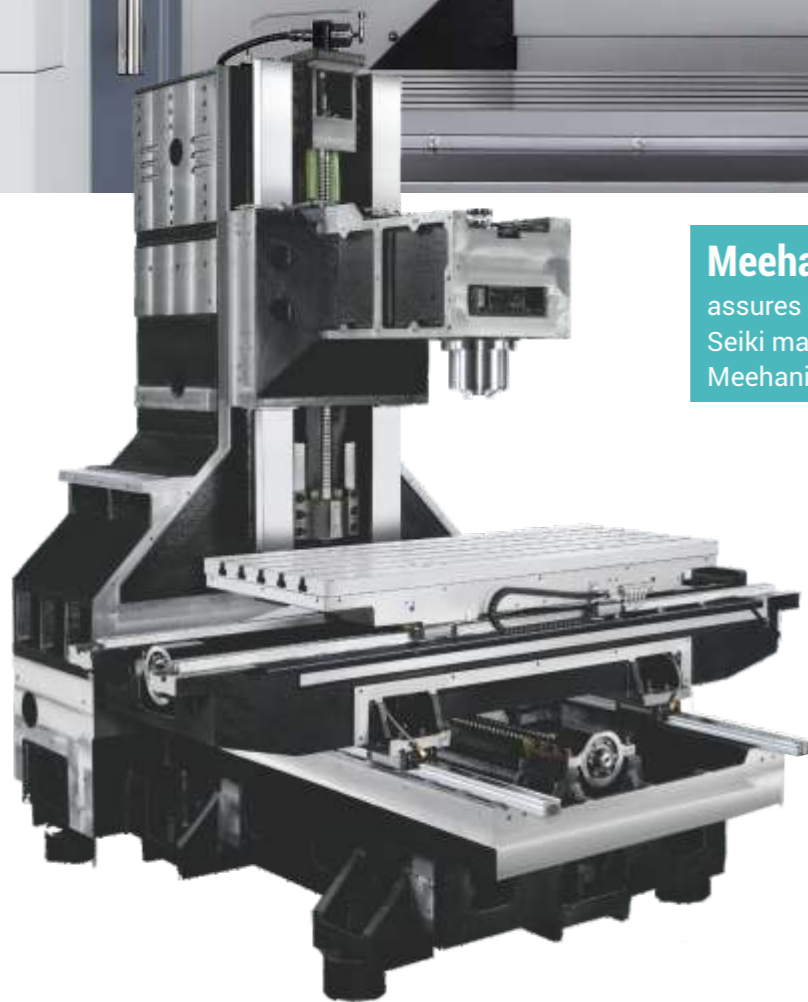
- Linear Guide Ways On All 3 Axis
- Pre-Tensioned Of 3 Axis Ballscrew
- Spindle Air Chilling
- Spindle Taper Air Blow
- Coolant Flush System Around Spindle Nose
- Full Enclosure Splashguard (Adopt Non-Toxic Painting)
- User Friendly Operation Manual
- Remote Control Mpg
- High Pressure Chip Flush System
- Automatic Lubrication Unit
- Working Light
- M07 Air Blow For Workpiece
- M30 Auto Power Off
- Operation Status Lights (3 Colors Led Light)
- Heat Exchanger For Electrical Cabinet
- Coolant Tank With High Pressure Pump
- Machine & Control Operation Manuals
- 1 Year Warrantee For Mechanism
- 2 Years Warrantee For Controller



Balanced load design



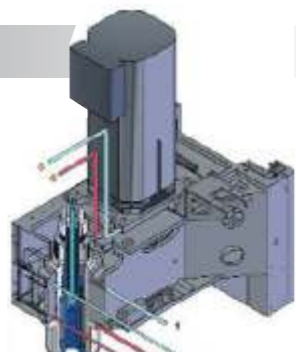
Meehanite high quality cast iron assures permanent rigidity and accuracy for each Akira Seiki machine casting frame by the authorized Meehanite foundries.



A Type Rigid Column
Optimum span steady base with A-type large box way column design, Z-axis employs robust slide way and spindle head cartridge for powerful pocketing and fast milling. (For model with Y-axis travel upper 540 mm).

Head Stock Thermal Control

Technology of coolant circulated inside inside the casting head stock to maintain the constant temperature to prevent deformation which generated by spindle during cutting.



Golden Triangular Frame

in optimum span of bed base and guide ways supports the superior acceleration and deceleration movement.



High Performance VMC

SR Series

Akira Seiki Taiwan

Travel Ranges

- 550x430 to 2600x1030 mm
- 35HP Power
- 9000 rpm Spindle
- High Cutting Dynamics
- High Reliability

MODEL	UNIT	SR-2	SR 3	SR-32	SR-42	SR-52	SR-45XP	SR-55XP
TRAVEL								
X axis travel	mm	550	762	815	1050	1300	1150	1350
Y axis travel	mm	430	430	540	540	540	640	640
Z axis travel	mm	460	460	560	560	560	660	660
Rapid Rate of X/Y/Z	m/min	30/30/24						
Working surface (WxH)	mm	560 x 380	700 x 380	950 x 480	1200 x 480	1450 x 480	1300 x 600	1500 x 600
Maximum load	KG	576	792	1080	1176	1296	1560	1800
Max Spindle Speed	RPM	9,000						
Spindle motor capacity	HP	15	15	18	18	18	18	18
Type of tool shank		BT 40						

Standard Features

- Linear Guide Ways For X And Y Axis, Z In Box Way
- Spindle Air Chilling
- Coolant Through Head Stock
- Spindle Taper Air Blow
- Full Enclosure Splash guard
- Complete Back Panel
- Front Door Interlock
- Chip Screw With Chip Trolley
- Chip Flush System By An Additional High Pressure Pump
- Rigid Tapping
- Remote Control Mpg
- Heat Exchanger For Electrical Cabinet
- Twin Working Lights
- Operation Status Lights (3 Colors Led Light)
- M30 Auto Power Off
- Manual Air Blow
- Automatic Lubrication Unit
- Container For Oil / Water Separation
- 1 Year Machine Warrantee
- 2 Years Warrantee For Controller

Choose from the below packages

+ VXP

V XP - High Performance Package

- 35 HP 12000rpm Spindle
- 28 Tool ATC
- 12000rpm Spindle with Oil Cooler
- ScrewType Chip Conveyor

++ SV

SV - Super Performance Package

- 42 Hp Spindle with 15000rpm @ 117 Nm Peak Torque
- 28 Tool ATC
- 15000rpm Spindle Oil Cooler
- Chain Type Chip Conveyor

+++ HV

HV - BT 50 Performance Package

- 28 Tool ATC
- 8000 / 6000 rpm Spindle
- No Chip conveyor



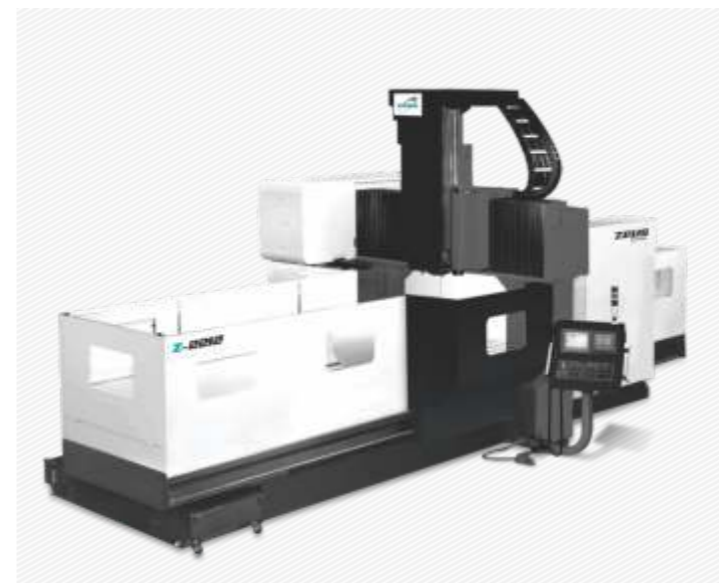
Double Column Machining Center

Zeus Series

Cosmos, Taiwan

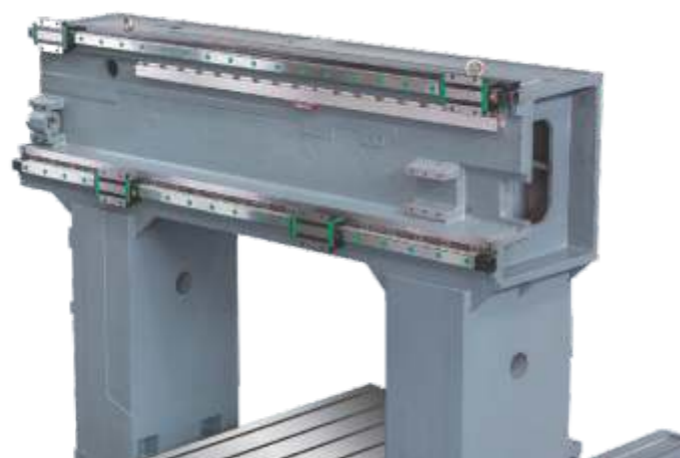
Travel Ranges

- 2000 x 1200 to 3000 x 1500 mm
- 8000 Rpm spindle
- BBT50 Spindle
- Mono Bridge design
- Step type beam heavy duty structure



Monobridge

- Column & Beam is made from SINGLE PIECE Casting
- This "MonoBridge" design drastically improves machine capability to execute high-speed machining for roughing, semifinishing and finishing operations.



Hydraulic Counter-balance on Z-axis



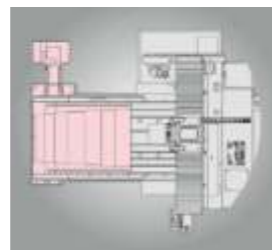
The Z-axis movement is counter-balanced by two hydraulic cylinders, ensuring outstanding smoothness and stability of Z-axis movement

Accumulator



The accumulator is used to supply pressure source to the hydraulic cylinders, allowing the Z-axis to move smoothly.

Efficient Chip Evacuation



The right and left side of base are equipped with two chip augers for delivering chips to the front mounted link chain type chip conveyor.

Directly Coupled To Ball Screw



The servo motor on the axes is directly coupled to the ball screw with a coupling, that eliminates backlash while achieving high transmission accuracy.

MODEL	UNIT	Z-2212	Z-2215	Z-3212	Z-3215
TRAVEL					
Table size	mm	2000 x 1100	2000 x 1300	3000 x 1100	3000 x 1300
Table Loading	KG	3500	4000	4500	5000
X axis travel	mm	2200	2200	3200	3200
Y axis travel	mm	1200	1500	1200	1500
Z axis travel	mm	760			
Spindle servo motor - cont / 30min	KW	11/15			
Distance between column	mm	1300	1500	1300	1500
Max Daylight	mm	960	960	960	960
Max spindle speed	RPM	6000			
Type of tool shank		BBT 50			
Tool storage capacity	EA	24			

Standard Features

- Spindle Speed 6000Rpm
- Geared Head Spindle With Bbt 50
- Spindle Oil Cooler
- X , Y & Z Axis With Roller Type Guide Ways
- 24 Tools Arm Type Atc
- Manual Pulse Generator
- Coolant Splash Guard
- Two Chip Screw & One Belt Type Chip Conveyor
- With Bucket
- Heat Exchanger For Electric Cabinet
- Programmable Coolant System
- Spindle Air Blast
- Automatic Power Off
- Transformer
- Working Lamp

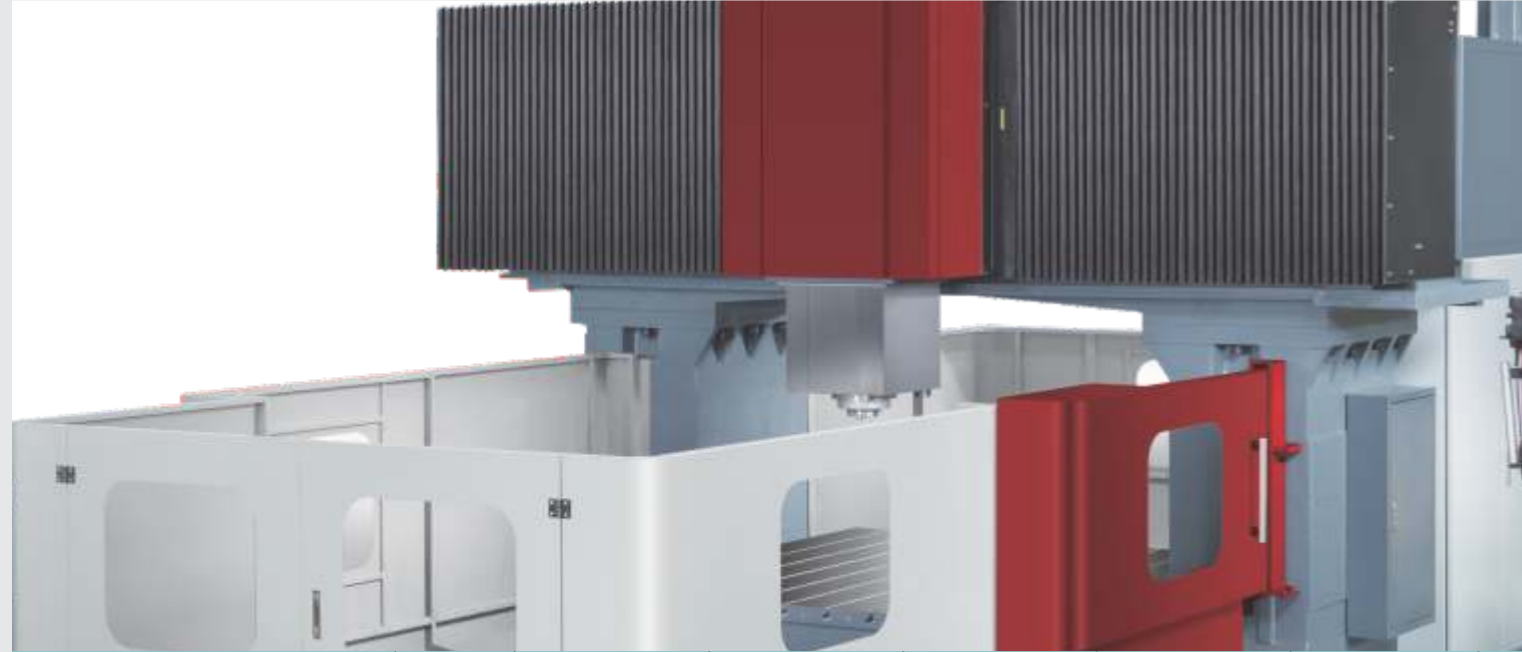
Double Column Machining Center

Maximus Series

Cosmos, Taiwan

Travel Ranges

- 2000 x 1600 to 6200 x 2800 mm
- 6000 Rpm spindle
- BBT50 Spindle
- 710NM Torque
- Step type beam heavy duty structure
- Auto attachment changer



MODEL	UNIT	M 2218	M 2718	M 3218	M 2224	M 2724	M 3224	M 4224	M 5224	M 6224	M 3228	M 4228	M 5228	M 6228	
TRAVEL															
Table size	mm	2000 x 1500	2500 x 1500	3000 x 1500	2000 x 2100	2500 x 2100	3000 x 2100	4000 x 2100	5000 x 2100	6000 x 2100	3000 x 200	4000 x 2500	5000 x 2500	6000 x 2500	
X axis travel	mm	2200	2700	3200	2200	2700	3200	4200	5200	6200	3200	4200	5200	6200	
Y axis travel	mm	1800	1800	1800	2300	2300	2300 (2800)	2300 (2800)	2300 (2800)	2300 (2800)	2800 (3200)	2800 (3200)	2800 (3200)	2800 (3200)	
Z axis travel	mm	1000			1000			1000			1000				
Spindle servo motor - cont / 30min	KW	15/18.5 (22/26)			15/18.5 (22/26)			15/18.5 (22/26)			15/18.5 (22/26)				
Distance between column	mm	1900	1900	1900	2400	2400	2400	2400	2400	2400	2800	2800	2800	2800	
Table loading capacity	KG	8000	9000	10000	10000	12000	12000	13000	14000	15000	12000	13000	14000	15000	
Max spindle speed	RPM	4000 (6000)			4000 (6000)			4000 (6000)			4000 (6000)				
Type of tool shank		BT 50			BT 50			BT 50			BT 50				
Tool storage capacity	EA	24			24			24			24				

Step Type Beam for Improved Cutting Stability

The oversized beam is of step type construction, that allows for better stability during cutting.

Two Roller LM Guide are mounted one LM Guide on top and one in the front for minimizing deflection due to heavy cutting.



Beam is scientifically reinforced by heavy ribbing

Standard Features

- Fanuc Oi Mf
- Spindle Speed 4000 Rpm
- Geared Head Spindle With Bt 50
- Spindle Oil Cooler
- X & Y Axis With Roller Guide Ways
- Z Axis With Box Guide Ways
- 24 Tools Arm Type Atc
- Manual Pulse Generator
- Coolant Splash Guard
- Two Chip Screw & One Belt Type Chip Conveyor With Bucket
- Automatic Lubrication Unit
- Heat Exchanger For Electric Cabinet
- Coolant System
- Spindle Air Blast
- Automatic Power Off
- Working Lamp
- Transformer



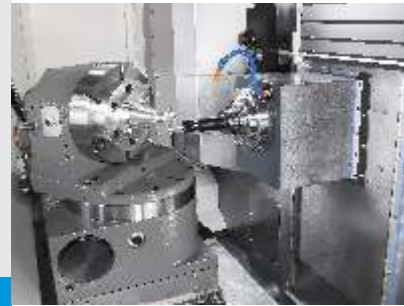
Heavy Cutting Spindle High Gear Ratio (4000 RPM)

15/18.5 kW Spindle with Geared head churning out a massive 710 N.m of torque.

Geared head with high/low gear ratio handles both high speed machining and heavy cutting application.

Fastest Twin Pallet Saving Total Cycle

- High efficiency, high accuracy.
- Compact floor space with twin pallet.
- Save loading / unloading time.
- Maximize the contact of positioning coupling for achieving stable accuracy, high rigidity and high loading cutting.
- Immediate detecting airtight for pallet change system.



Compact HMC Available in 4 Axis and 5 axis Configuration



**H3XP
4 Axis HMC**



**H250RT
5 Axis HMC**

	PERVIOUS PRODUCTION PROCESS	H3XP		PERVIOUS PRODUCTION PROCESS	H250RT
Nos. of Machines			Nos. of Machines		
Nos. of Programs			Tools		
Tools			Nos. of Fixtures		
Loading / Unloading	20 sec.	5 sec.	Nos. of Operations		
Nos. of Operations			Floor Space	Big	Small
Floor Space	Big	Small	Benefit	High Cost, High Maintenance, Occupy Floor Space	Non-cutting Time Reduce Around 30%, Once Catch Up, Save More Accuracy, Save Loading / Unloading Time, Save Energy, Compact Floor Space.
Benefit	High Cost, High Maintenance, Occupy Floor Space	Non-cutting time reduce around 30%, Save loading/ Unloading time, Save energy, compact floor space.			



AKIRA-SEIKI®

Horizontal Drill Tap Center

H Series

Akira Seiki, Taiwan

Table Size

- 320 x 320 mm
- 12000 Rpm spindle Speed
- 48m/min Rapid Speed
- 5 Axis Available
- HSM Ready
- Multi Pallet Pool

MODEL	UNIT	H3XP	H250RT
TRAVEL			
X axis travel	mm	350	380
Y axis travel	mm	350	250
Z axis travel	mm	350	350
Rapid Rate of X/Y/Z	m/min	48 / 48 / 48	
Working surface (W x L)	mm	320x 320	Ø350 (Ø250)
Table loading capacity	KG	200	100
Max spindle speed	RPM	12000/15000	12000/15000
Spindle motor	HP	11	11
Spindle taper		BT 40 / ISO40/DIN40	
Tool storage capacity		36T+1(60T OPT)	
Floor space (Width x Length)	mm	1760 x 4040	1760 x 3400

Standard Features

- Fanuc 0iMF Controller
- Ethernet for program transfer 24 Tool arm type automatic tool changer
- Belt drive spindle
- Z-axis servo brake
- LM Guideways on all axes
- Full splash guard
- Rigid tapping
- Portable MPG
- Heat Exchanger for electrical panel
- Air and air gun
- Automatic lubrication system Coolant system
- Oil coolant separator
- Chip Tray
- Operation lamp
- Work lamp
- Leveling pad
- Maintenance kit, Operation and maintenance manual

High Performance HMC
LH Series
 Litz, Taiwan

Table Size

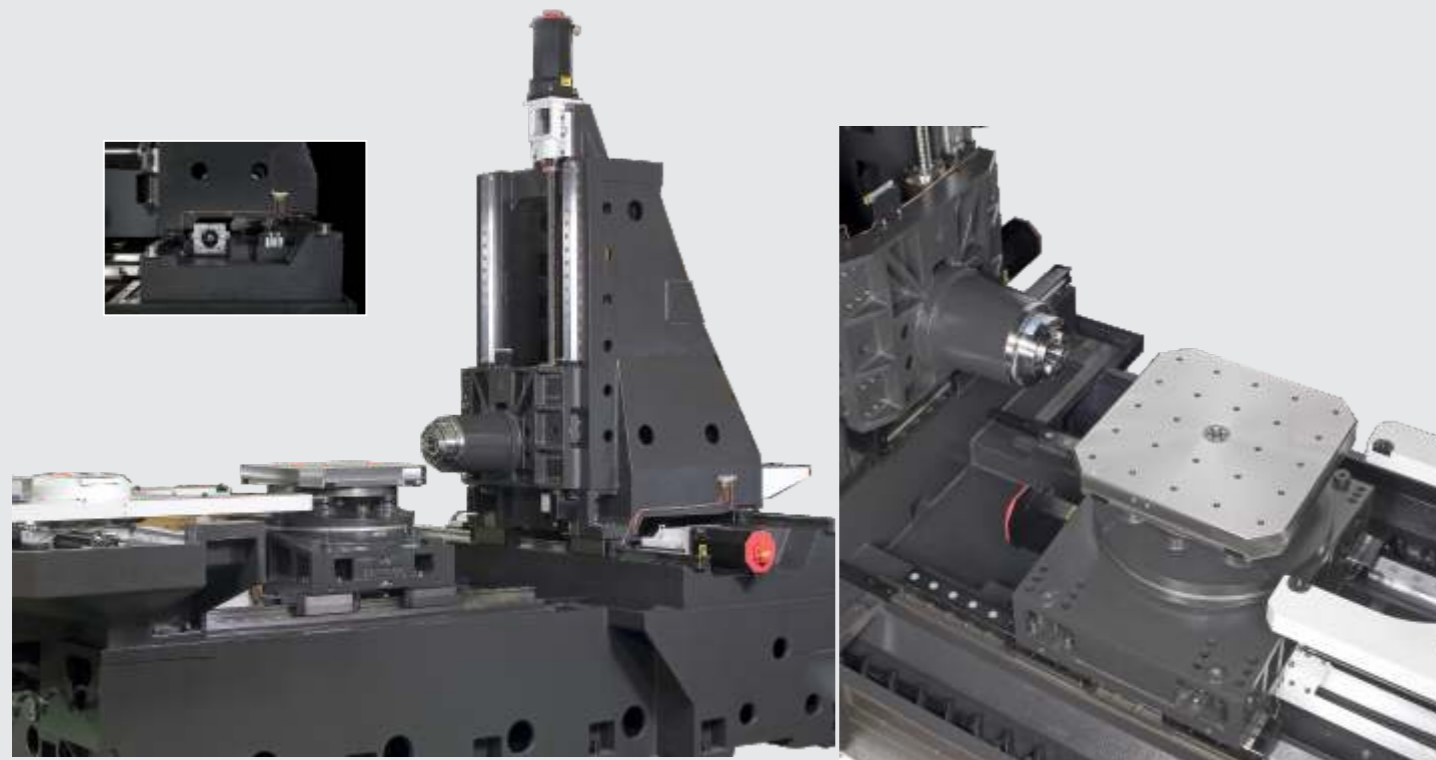
- 500 x 500 & 800x800 mm
- 660NM Torque Opt.
- 48M/MIN Rapid Speed
- Coolant through ballscrew
- High performance
- Hydraulic port through pallet



MODEL	UNIT	LH-300	LH-350A	LH-500	LH-630	LH-800
TRAVEL						
Table size	mm	320 x 320	350 x 350	500 x 500	630 x 630	800 x 800
B-axis Rotation angle	Deg	1 deg. (0.001 deg.)				
X axis travel	mm	460	460	700	1000	1300
Y axis travel	mm	460	460	650	850	1200
Z axis travel	mm	350	350	650	950	1200
Spindle servo motor - cont / 30min	KVA	7.5/11	7.5/11	15/18.5	22/26	22/26
Rapid speed (X/Y/Z)	m/min	48/48/48	48/48/48	36/36/36	32/32/32	32/32/32
Table loading capacity	KG	250	250	500	1000	2000
Max spindle speed	RPM	15000	12000	10000 (6000)	10000 (6000)	6000
Type of tool shank		BT 40		BT 40/ BT 50		BT 50
Tool storage capacity	EA	30		60/40		

Standard Features

- Spindle Rpm Bt-50 6000Rpm & Bt-40 8000Rpm
- Spindle Oil Cooling System
- Spindle Air Seal System
- Spindle Direct Transmission
- 3-Axis Roller Linear Rail
- 3-Axis Hollow Ballscrew Cooling System
- Pallet 1 *Division
- Pallet M16 Fixing Holes
- Splash Ring
- Track Type Chip Conveyer System
- Chip Cart
- Indoor Chip Auger
- Mechanical Oil-Coolant Separator
- Overhead Chip Wash-Down System
- Disc-Type Coolant Separator
- Front Door / Side Door Safety Switch
- Tool Storage Capacity 40T
- Tool Specification Bbt
- M30 Automatic Power-Off System
- Working Light (Lighting)
- Warning Light
- Electrical Cabin Heat Exchange System
- Fanuc 0lmf



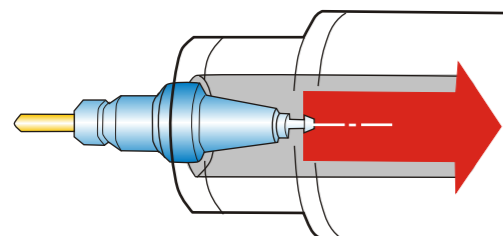
Mechanical Design

Robust and Precision Machine Bed
 The major construction parts are based on Meehanite cast iron which is structurally stable, ensuring machine quality permanently.

Mechanical Rigidity

Unique rib construction
 Wide base and robust structure ensure steady machining against heavy loads.

● **Spindle with quick reacting and high tool-pulling force**



■ Spindle tool-pulling force
1800 kgf (17000N)

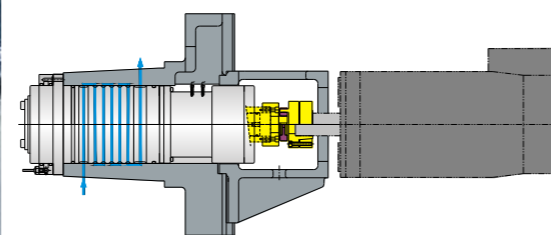
■ Spindle with high tool-pulling force, providing tool clamping and high rigidity, enhancing machining rigidity.

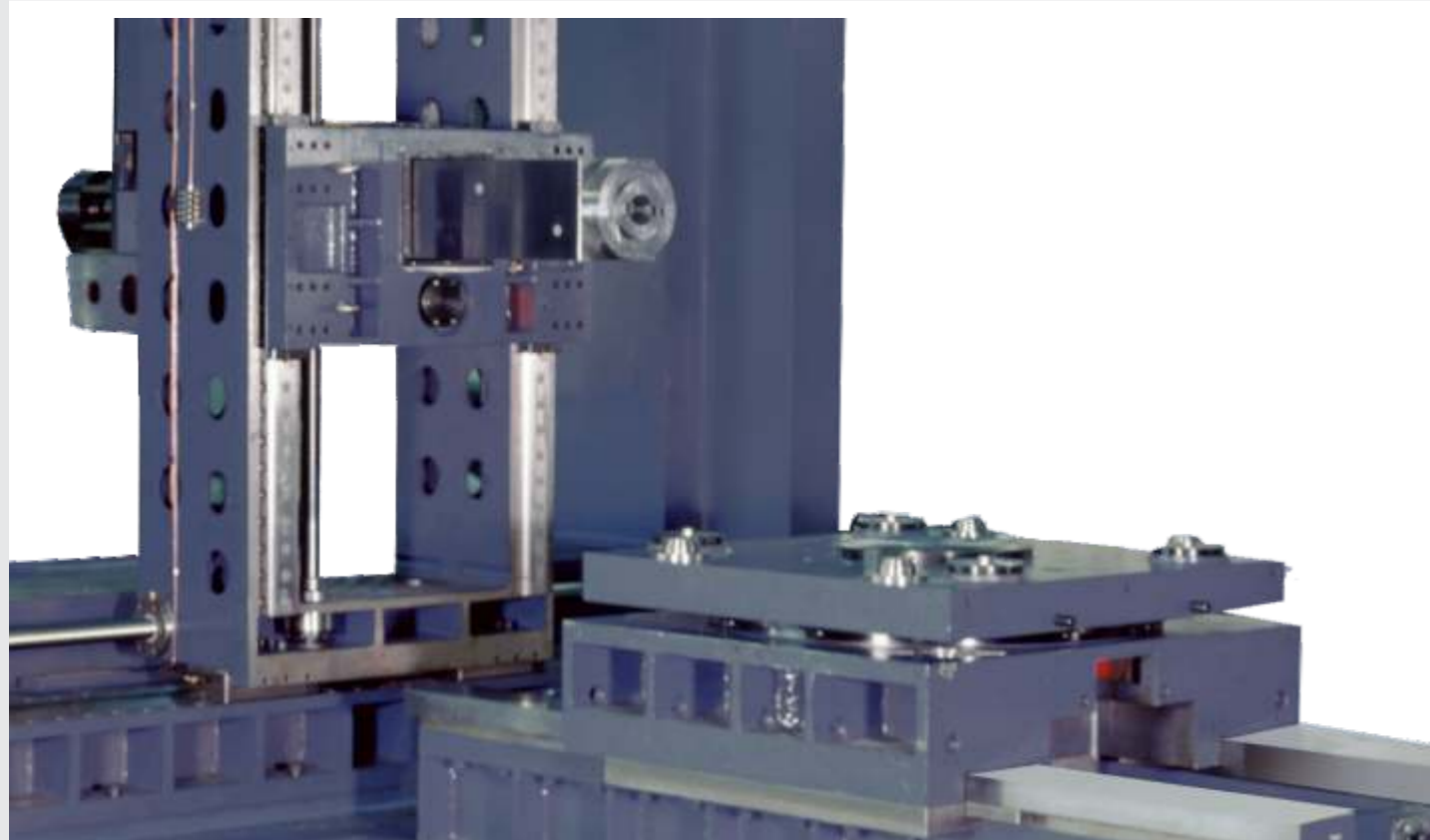


- The spindle only takes **1.7** seconds to accelerate from 0 to 6000 RPM.
- The spindle only takes **1.2** seconds to decelerate from 6000 RPM. to 0.

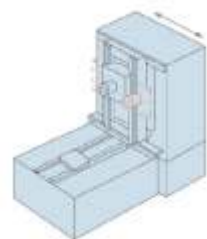


Unique IDD Spindle Transmission
LH-500/LH-630A

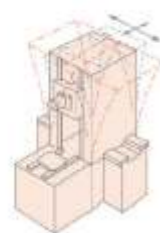




Box-in-Box Construction



Box-in-Box Construction



Conventional single column

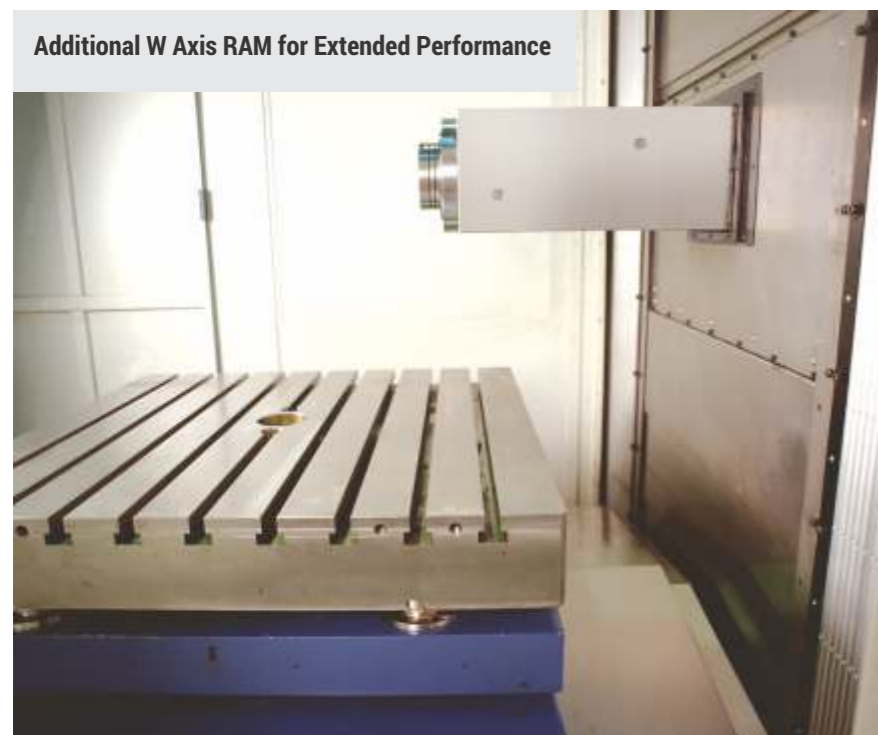
The design of our X-axis has slideways on both top and bottom of our Box-in-Box construction. Designed with twin drive simultaneous ball screw this enhances the balance and greatly increases the rigidity ensuring accuracy under all conditions.



Auto pallet changer available



Additional W Axis RAM for Extended Performance



Heavy Duty HMC

HMC Series

You Ji Taiwan

Table Size

- 800 x 800 & 2600x2200 mm
- Box-in-Box Structure
- RAMType HMC
- W-Axis Standard
- Available with & without APC

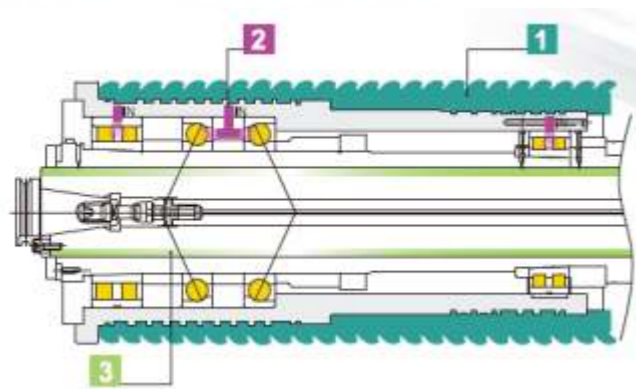
MODEL	UNIT	HMC-1000BP	HMC-1200BP	HMC-1600BP	HMC-2000BP	HMC-2500BP
TRAVEL						
X axis travel	mm	1500	1800	2200	3000	3400
Y axis travel	mm	1000	1500	1500	1800	1800
Z axis travel	mm	1200 (W-600)	1500 (W-700)	1500 (W-700)	1500 (W-700)	2000 (W-700)
Rapid Rate of X/Y/Z/W	m/min	20/20/15/15				
B-axis rotation angle		1 deg. (0.001deg.)				
Pallet change		Shuttle type				
Working surface (W x L)	mm	1100 x 1000	1400 x 1200	1600 x 1400	2200 x 1800	2600 x 2200
Table loading capacity	KG	3000	5000	8000	10000	15000
Max spindle speed	RPM	3500 (with Gearbox)				
Spindle motor	KW	22/26		30/37		
Type of tool shank		BT 50				

Standard Features

- Fanuc Oi-M Controller
- Automatic pallet changer
- Linear Scales for X, Y & Z Axis
- Screw Type Chip Disposal Equipment
- Steel Belt Type Chip Conveyor
- Coolant Unit
- Coolant through spindle 17 Bar
- Deluge Coolant
- Coolant System Around The Spindle
- Oil Skimmer
- Coolant Gun
- Hydraulic Unit
- 40 Tools ATC
- Spindle Air Blast System
- Dual Speed Gearbox
- Panel Ac
- Rigit Tapping
- Full Enclosure Guarding
- Auto Lubrication Unit
- Protection Covers For Slideways
- Tool Box
- Signal Tower Light
- Working Lamp
- Leveling Pads & Screw
- Operation Manual

TRIPLE COOLING / Temperature Control = Accuracy Control

1. First Cooling: Oil cooling for external spindle sleeve.
2. Second Cooling: Oil mist cooling for spindle bearing
3. Third Cooling: Oil cooling for boring spindle.



CUTTING EDGE TECHNOLOGY- HYDROSTATIC SYSTEM ON B AXIS

- The YOU JI designed Rotary Table uses the latest Hydrostatic technology, our system can carry a maximum of 15 tons (Option)
- High precision B axis provides $\pm 7.5''$ positioning accuracy, and $\pm 5''$ repeatability accuracy.
- The combination of the 3 axis of the machine and B axis allows from-axis-machinign capability, which provides all necessary criteria machining needs of complex work pieces.
- The Floating Braking System ensures superior accuracy and stability even under heavy cutting.

Optional Features



Manual Extension Milling Head

Manual 90° Milling Head

Manual Universal Milling Head

Manual 90° Extension Milling Head

Spindle Supporting Sleeve



Horizontal Boring Machine

HBM Series

You Ji Taiwan

Spindle Bore Size

- 110 x 130 Available
- Working Range of 2x1.8 x1.2 M Up to 5.5x1.8 x1.2 M
- Various head can be configured

MODEL	UNIT	HBM 110	HBM 130
TRAVEL			
X axis travel	mm	2000 ~ 3000	2500 (upto 5500)
Y axis travel	mm	1800	1800 (upto 3000)
Z/W axis travel	mm	1250 / 500	1250 (1600/2000)
Rapid Rate of X/Y/Z/W	m/min	10/10/10/6	
Working surface (W x L)	mm	1400x 1600	1800 x 1800 (1800x2200)
Table loading capacity	KG	10000	12000
Max spindle speed	RPM	3000	3000
Spindle motor	KW	22/26	37/45
Type of tool shank		BT 50	
Tool storage capacity	EA	40	
B Axis rotation angle		as per request	
Power Capacity	KVA	110	110

Standard Features

- Fanuc Oi-Mf
- Rotary Table
- Dual Speed Gearbox
- Spindle Air Blast System
- Side Coolant For Spindle
- Oil Mist Lubrication System For Spindle
- Rigid Tapping
- Hyd. System
- Auto Lubrication Unit
- Coolant System
- Screw Type Chip Disposal Equipment
- Steel Belt Type Chip Conveyor
- Telescopic Covers For Slide Ways
- Panel Ac
- Lighting Inside The Electrical Cabinet
- Working Lamp
- Signal Tower Light
- Manual Pulse Generator
- Levelling Bolt & Blocks
- Ethernet Socket

High Performance HTL

Akira SL Series

Akira Seiki, Taiwan

Max Swing Dia

- 450 x 750MM
- True Slant Bed Structure
- LM Guideways in all Axes
- High torque available
- Live tool opt.

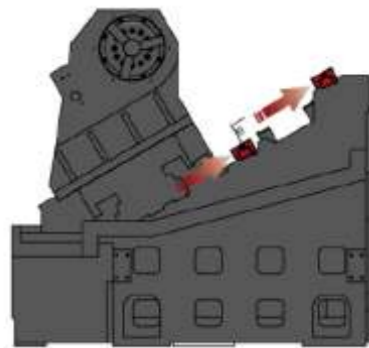


MODEL	UNIT	SL-15	SL-20	SL-25	SL-30	SL-35	SL-40
TRAVEL							
Max. swing diameter	mm	450	450	530	600	650	750
Swing over saddle	mm	280	280	350	400	450	550
Max cutting diameter	mm	280	280	350	400	450	550
Max cutting length	mm	200	330	400	600; 1:1000	600; 1:1000	950; 1:1500
Chuck size	inch	CR 42 Collect	6"	8"	8" (Opt 10")	10" (Opt 12")	15" (Opt 18")
X Axis travel	mm	150+15	150+15	195+15	220+20	235+20	285+25
Z Axis travel	mm	220	350	435	610; 1:1010	630; 1:1025	675; 1:1520
Max. spindle speed	RPM	6000	6000	5000	4500	3500	2500
Spindle nose		A 2-5	A 2-5	A 2-6	A 2-6	A 2-8	A 2-11
Bar capacity	mm	42	45	52	65	78	103
No of tool station	EA	10		12			
Rapid feed rate (X/Z)	m/min	36/36	36/36	36/36	36/36	36/36	30/30
Milling option		Available	Available	Available	Available	Available	Available
Tailstock travel	mm		210	410	570; 1:970	570; 1:970	975; 1:1520
Tailstock taper			MT 3	MT 4	MT 4	MT 4	MT 5



Two-stepped Rigid Base Support

To enforce the steady rigidity while fast feeding cut, Turning Center base designed in dual level of Z axial guide ways. This increased contact face by both lower and upper guide way obtain more cutting rigidity than conventional only one contact face

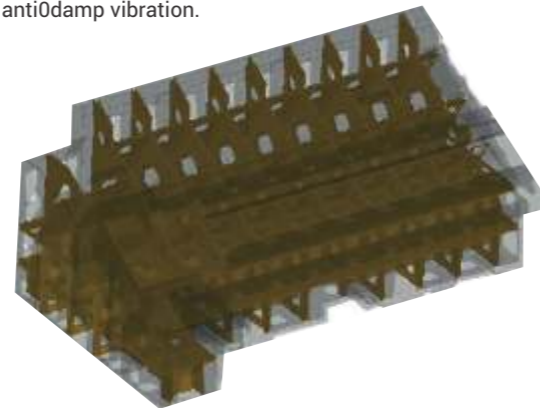


AKIRA-SEIKI SL models with fully two-stepped guide ways with fully balance contact support (Available for L30(L)(MC)/SL35(L)(MC)/SL40(L) only)

Reinforced Frame Construction

AKIRA-SEIKI Turning Center casting are steady as rock to perform excellent dynamic accuracy and vibration absorption while rapid cutting.

The internal ribs of each key casting elements like base, column, head-cartridge and saddles are enforced for deformation-resistant and anti0damp vibration.



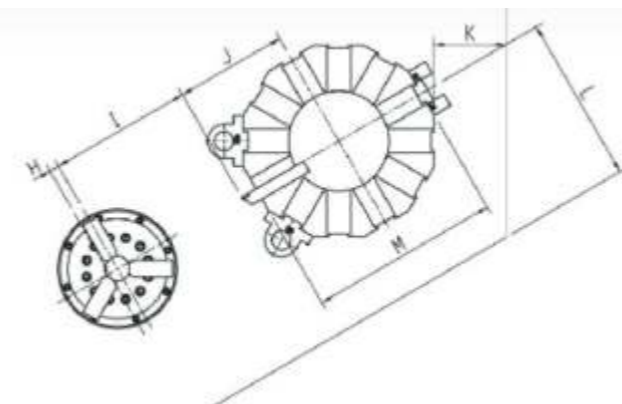
Standard Features

- Pre-Tensioned Of 2 Axis Ballscrew
- Hydraulic System For Chuck Clamp (Same Unit For Tailstock / Quill
- Clamp While Equipped)
- Manual Tailstock (SI20)
- Programmable Tailstock (SI30(L) / SI35(L) / SI40)
- Coolant Flush System (1 Individual Pump)
- M07 Auto Air Blow For Work Piece
- Soft Jaws And Hard Jaws * 1 Set 3 Pcs (Not Include SI15 Collect Chuck)
- Padel Switch For Chuck Clamp / Unclamp
- Bar Feeder Interface (N/A For SI40)
- Heat Exchanger For Electrical Cabinet
- Operation Status Lights (3 Colors Led Light)
- Automatic Lubrication Unit
- Container For Oil / Water Separation
- 1 Year Machine Warrantee
- 2 Years Warrantee For Controller
- Target Parts Number Setter Inside Nc (Software Only)
- Remote Mpg Control

Tooling Interference

Polygon 10/12T Turret for 2 axis model mm/inch

	GT12	SL15 SL20	SL25	SL30 SL30L	SL35 SL35L	SL40 SL40L
H	--	10 / 0.4	15 / 0.59	20 / 0.8	20 / 0.8	25 / 0.98
I	--	150 / 5.9	195 / 7.7	220 / 8.7	235 / 9.3	285 / 11.2
J	--	166 / 6.5	188 / 7.4	240 / 9.4	245 / 9.6	305 / 12
K	--	102 / 4.02	95 / 3.7	122 / 4.8	145 / 5.7	99 / 3.9
L	--	245 / 9.6	299.5 / 11.7	345 / 13.5	349 / 13.4	385 / 15.16
M	--	272 / 10.7	316 / 12.4	400 / 15.7	410 / 16.1	520 / 20.5



Highly rigid machine structure

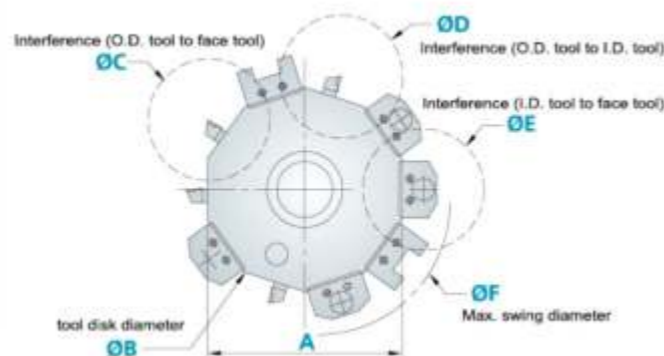
- A one-piece Meehanite casting delivers significant benefits for precision turning. The rigid base evenly dissipates vibration and heat throughout its entire structure.
- A robust slant-bed design supports the spindle, turret and tail stock for additional rigidity. This design also facilitates chip disposal.



Tool interference for hydraulic turret

Model	A	OB	OC	OD	OE	OF
YH21	360	380	225	232	225	510
YH28	420	435	262	270	262	561
YH36	500	517	233	254	300	692
YH50	500	517	233	254	300	692
YH60	650	668	313	332	319	840

Unit:mm



Highly efficiency turret

- The turret's high precision curvic coupling ensures powerful hydraulic clamping - even for your heaviest cuts.
- A non-stop, random indexing system makes tool changes quick and minimizes non-cutting time.
- Through turret coolant flushes chips away and delivers superior surface finishes.

Highly precision way system

- Box ways on the X/Z axes provide the rigidity for heavy and interrupted cuts.
- AC servo motors drive the X/Z axes ballscrews for fast acc/dec rates and maximum thrust.
- Pre-tensioned ballscrews reduce thermal deformation and enhance machining accuracy.

Programmable hydraulic tailstock

- Ultra rigid structure fully supports parts to eliminate vibration.
 - Fully programmable and easy-to-use.
- The YH36/50/60 models are equipped with a rotating (built-in-type) live center. The quill is controlled by the CNC program.



Heavy Duty HTC

YH Series
YOU JI, Taiwan

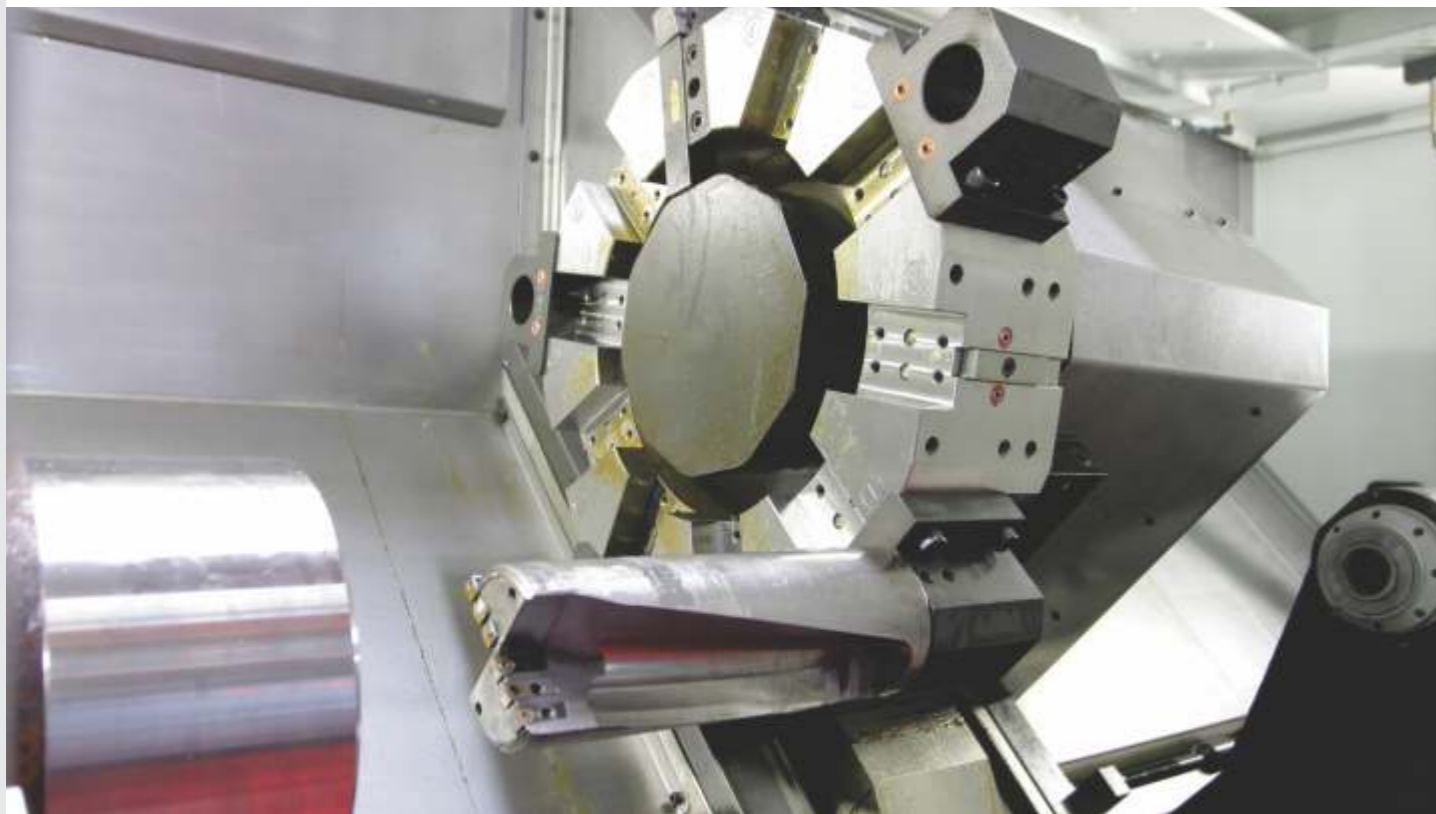
Max Swing Dia

- 560 to 900MM
- 600+ NM Torque
- Heavy duty design
- Box guideways in all axes
- Live tool
- True slant bed

MODEL	UNIT	YH-21	YH-28	YH-36	YH-50	YH-60
TRAVEL						
Max. swing diameter	mm	560	680	720	800	900
Swing over saddle	mm	347	390	488	590	620
Max cutting diameter	mm	416	430	600	680	720
Max cutting length	mm	450	550: 1:1050	750: I:1350 II: 2000 III : 3000	1500; 1:2000 II: 3000 III : 4000	2000; 1:3000 II:4000
Chuck size	inch	8"	10"	15"	18"	24"
X Axis travel	mm	-10~+208	-40~+215	-30~+300	-30~+340	-30~+360
Z Axis travel	mm	470	560; I:1060	770; I:1370 II:2020 III:3020	1520 2020 II:3020 III:4020	2020 3020 II:4020
Max. spindle speed	RPM	4000	3000	1~950; 950~2000	1~300; 300~1500	1~300; 300~1200
Spindle nose		A 2-6	A 2-8	A 2-11	A 2-11	A 2-15
Bar capacity	mm	52	74	89	114	152
No of tool station	EA	10				
Rapid feed rate (X/Z)	m/min	11/15	18.5/22	37/45	37/45	37/45
Milling option		Available	Available	Available	Available	Available
Tailstock travel	mm	450	520; I:1030	499; I:1149	1335; I:1835	1835; I:2835
Tailstock taper		MT 4	MT 5	MT 4/MT5	MT5 (Rotary quill)	Mt5 (Rotary quill)

Standard Features

- Spindle Motor
- Dual Speed Gearbox
- Fanuc Oi T
- Hydraulic Chuck
- Hard Jaws
- Soft Jaw
- Foot Pedal
- Hydraulic Tailstock
- Rotary Quill Tailstock
- Live Center
- Coolant Pump
- Manual Steady Rest - Yh 50
- Hydraulic Turret
- Od Tool Holder
- Boring Bar Holder
- Boring Bar Bush
- Bmt Turret + C Sereis
- Hydraulic Unit
- Heat Exchanger For Hyd Oil
- Heat Exchanger For Electrical Cabinet
- Auto Lubrication Unit
- Side Exit Chip Conveyor
- Chip Bucket
- Full Enclosure Guarding
- 3 Stage Signal Tower
- Working Lamp
- Machine Manual



Oil Country HTC AH Series

YOU JI, Taiwan

Max Swing Dia

- 950 MM
- 1000 to 3200 MM Between Center
- 8923 NM Torque
- 220 to 406 MM Bore Dia.
- 3 Stage Gearbox
- Live Tool

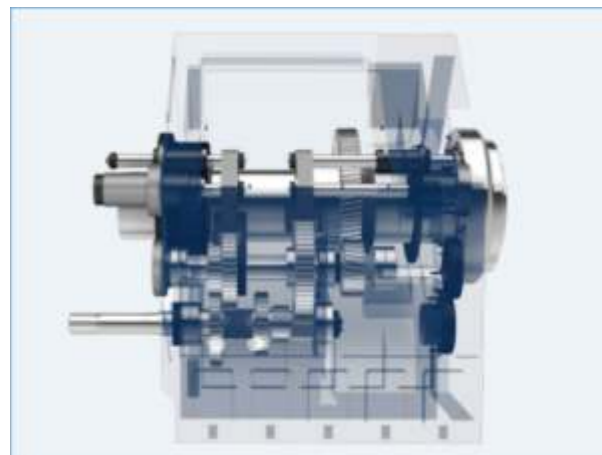


Three step gearbox

Experience the power with the You JI-built, 3-speed gearbox on all AH Series machines. The optimum-designed gear ratio performs continuous full-power output during gear shifting, achieves substantially more torque than other gearbox alternatives.

Spindle front and rear chucks

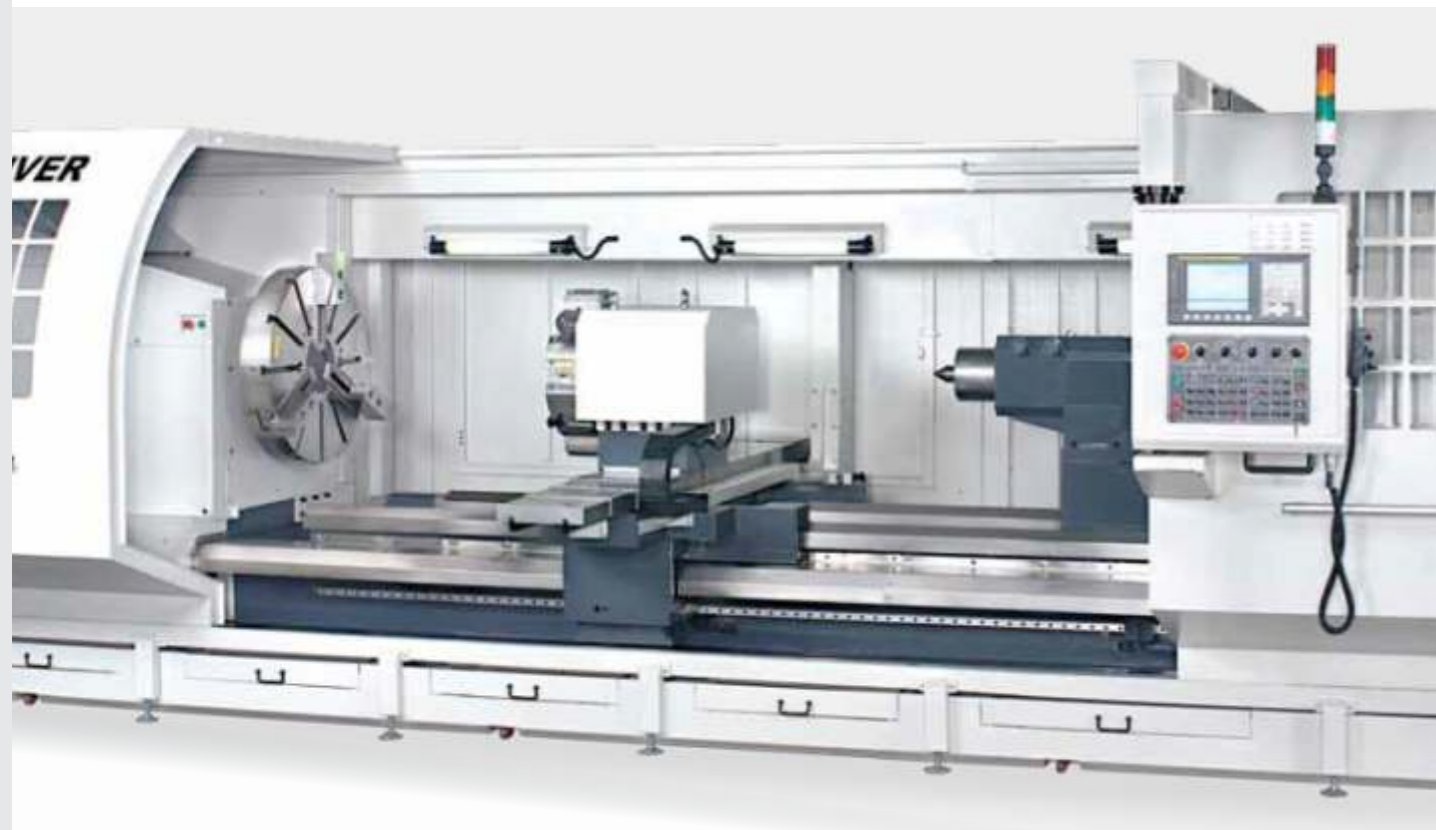
Spindle big-bore front & rear chucking system is applicable to long shaft machining. This solution efficiently reduces windup and distortion of the workpiece, while increasing machining accuracy and stability.



MODEL	UNIT	AH-06	AH-09	AH-12
TRAVEL				
Max. swing diameter	mm	950	950	950
Swing over saddle	mm	750	750	750
Max cutting diameter	mm	900	900	900
Max cutting length	mm	1000; I:2100; II:3200		
Chuck size	inch	Manual chuck		
X Axis travel	mm	-30~+450		
Z Axis travel	mm	1030; I:2130; II:3230		
Max. spindle speed	RPM	1~230; 230~620; 620~1200	1~140; 140~320; 320~600	1~120; 120~260; 260~400
Spindle nose		A 2-15	A 2-15	A 2-20
Bar capacity	mm	153	232	306
No of tool station	EA	12		
Rapid feed rate (X/Z)	m/min	37/45		
Milling option		Available		
Tailstock travel	mm	900; I:2000; II:3100		
Tailstock taper		MT 5		

Standard Features

- Fanuc Oi-T Controller,
- Hydraulic Chuck,
- Hard Jaws
- Soft Jaw
- Foot Pedal (Hydraulic Chuck)
- Foot Pedal (Tailstock)
- Hydraulic Tailstock
- Live Center
- Coolant Pump
- 12 Station Hyd Turret
- Face Tool Holder
- Boring Bar Holder
- Boring Bar Bush
- BMT Power Turret
- Hydraulic Unit
- Hydraulic Oil Cooler
- Auto Lubrication Unit
- Heat Exchanger
- Chip Conveyor
- Chip Trolley
- Full Enclosure Guarding
- Signal Tower Light
- Working Lamp
- Tool Box With Tools
- Operation Manual And Part List



Turret



OP2-1
Hydraulic turret H4



OP2-3
Hydraulic turret V8



OP6
Double chuck



OP2-4
Hydraulic turret V12



OP2-5
Hydraulic turret H4-VDI



OP2-6
Power turret



OP9
Boring attachment



Flatbed Lathe DHL/DHK Series Denver, Taiwan

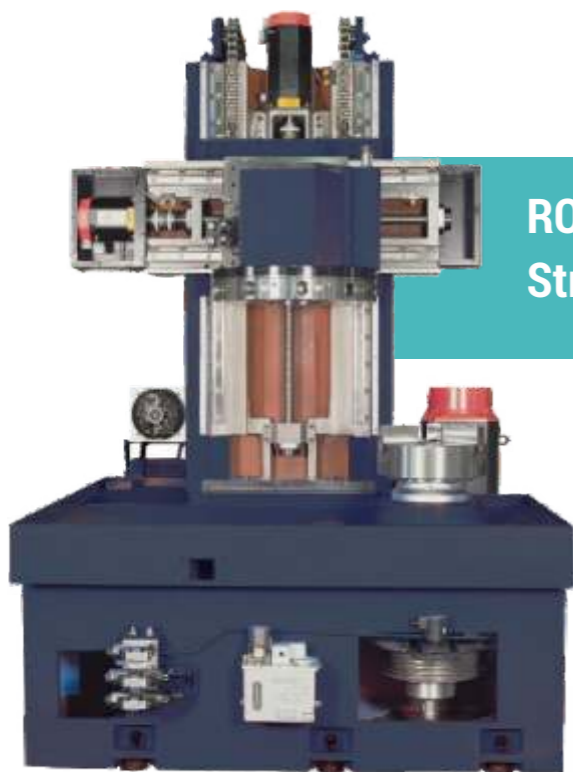
Admit Between Center

- 1500 Upto 10000 MM
- Bedwidth 610 Upto 1160 MM
- Spindle Nose A2-11 Upto A2-20
- Backside chuck optional

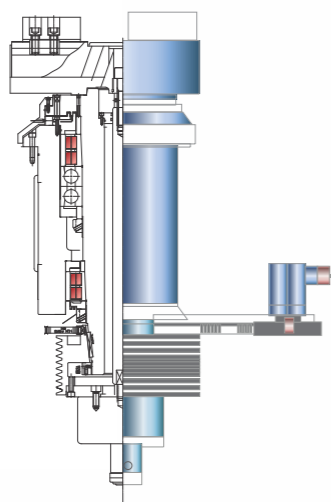
MODEL	UNIT	AL-460	AL-560	DHL-960	DHL-1120	DHL-1220	DHL-1420	DHK-960	DHK-1120	DHK-1220	DHK-1420
TRAVEL											
Swing over bed	mm	460	560	960	1120	1220	1420	960	1120	1220	1420
Swing over cross slide	mm	260	360	600	560	610	710	550	710	810	1210
Admit between center	mm	500;I:1000; II:1500; III:2000		1500;I:2000;II:3000; III:4000; IV:4000; V:4000				2000;I:3000;II:4000; III:5000; IV:6000			
Spindle bore	TON	70		152;230;255;312;380				152;230;255;312;380			
Spindle nose		A2-6(Opt A2-8)		A2-11; A2-15;A2-20				A2-11; A2-15;A2-20			
Bed width	mm	317		610				810			
X Axis travel	mm	230		600				600			
Z Axis travel	RPM	500;I:1000; II:1500; III:2000		1500;I:2000;II:3000; III:4000; IV:4000; V:4000				2000;I:3000;II:4000; III:5000; IV:6000			
Spindle range	Step	Manual 4 step (Opt Auto)		Auto 4 step							
Spindle speed	RPM	1800 (Opt 3000)		6~500							
Spindle motor	KW	7.5		22/26 (Opt 30)							
Turret type		Manual 4 way; other available				H4 Hydraulic turret; other available					
Tailstock		Carried by saddle				Manual / Motorized					
Steady rest		As per request				As per request					

Standard Features

- Controller: Fanuc Oi-TD
- Spindle 4-Steps Speed Auto. Change
- XZ-Axes Auto. Lubrication System
- XZ-Axes With Turcite-B
- XZ-Axes C3 Ball Screw
- Rear Chain Type Chip Conveyor
- Manual Tailstock
- Quill 125Mm For DHL Model
- Strong Manual /Electric Tailstock
- Quill Ø 200Mm For DHK Model
- (Manual Quill, Motorized Base)
- Steady Rest 16"
- Coolant System
- Full Enclosed Splash Guard
- Heat Exchanger
- Dead Center
- Tools & Tool Box
- Operational Manual



ROBUST FIXED COLUMN
Structure for high stability



Turret type VTL
CY Series
YOU JI, Taiwan

Chuck Size

- 8 to 32 inch
- C Axis with live tooling option
- Twin machine LH & RH Available
- Heavy duty cutting design

MODEL	UNIT	CY-275H R/L	CY-550H R/L	CY-750H R/L	CY-900H R/L
TRAVEL					
Max. swing diameter	mm	600	750	1000	1200
Swing over saddle	mm	275	550	750	900
Max. cutting diameter	mm	450	700	850	1000
Max. cutting length	mm	420	485	710	900
Chuck size	inch	12" (Opt 15")	15" (Opt 18"; 21")	18" (Opt 21"; 24")	24" (Opt 32")
X Axis travel		-25~+225	-15~+350	-50~+430	-50~+495
Z Axis travel		450	500	620	800
Max spindle speed	RPM	50~2500		50~2000	50~1500
Spindle nose	mm	11/15	18.5/22	18.5/22	18.5/22
Number of tool station	EA	8	8	10	10
Feedrate rapid speed (X/Z)	m/min	12/24	12/24	12/20	12/20

Standard Features

- Chuck size
- 8 to 32 inch
- C Axis live tooling option
- Twin machine L&R available
- Heavy duty structure



Motor held in fixture



Fly wheel held in fixture



Motor cover held in fixture



Motor part held in fixture



Pump held in fixture



Motor base held in fixture



Diff case held in fixture with tailstock



Stub axle held in fixture



RAM Type VTL

VTL / VTH Series

YOU JI, Taiwan

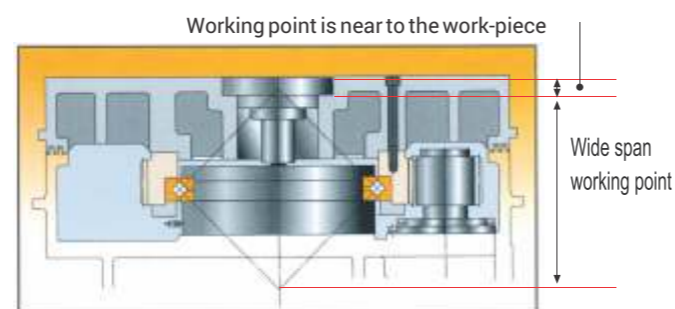
- Table Diameter**
- 1000 to 8000 mm
 - ATC Available
 - C Axis live tooling option
 - Twin ram option
 - Heavy duty structure



One Piece Column Structure

VTL 1000-2500 series

The high rigidity box type symmetric column structure is fitted to machine base. The heavily walled and multi ribbed design minimizes the thermal distortion, withstanding static and dynamic torsion, ensures a high rigid end stable machine assembly.



The large vertical turning lathes are equipped with cross roller bearing. The bearing, with the characteristics of high precision, high loading and high rigidity, is suitable for machining large and non-symmetrical work-pieces.



Model	Unit	YV-1000ATC	YV-1200ATC	YV-1600ATC	VTL-2000ATC	VTL-2500ATC	VTL-3000ATC	VTL-3500ATC	VTL-4000ATC	VTL-4500ATC
Table size	mm	1000	1250	1600	2000	2500	3000	3500	4000	4500
Max. swing dia.	mm	Ø1350	Ø1600	Ø2000	Ø2500	Ø3000	Ø3400	Ø4100	Ø4600	Ø5100
Max. cutting dia.	mm	Ø1100	Ø1350	Ø1800	Ø2300	Ø2800	Ø3300	Ø3800	Ø4300	Ø4800
Max. cutting height	mm	900	1200	1200	1600; I:2000; II:2000	1600; I:2000; II:2000	1700; I:2300; II:2900	1700; I:2300; II:2900	1600; I:2100; II:2700	1600; I:2100; II:2700
Max. workpiece weight	KG	4000	5000	8000	10000	15000	20000	20000	30000	30000
X Axis travel	mm	-400~+720	-100~+1230	-100~+1510	-1000~+1350	-900~+1600	-1500~+1825	-1750~+2160	-2000~+2500	-2000~+2500
Z Axis travel	mm	800	900	900	950; I:1200; II:1400	1200; I:1200; II:1400	1500; I:1500; II:1500	1500; I:1500; II:1500	1500; I:1500; II:1500	1500; I:1500; II:1500
Crossrail travel	mm	-	-	-	1150; I:1550; II:1550	1150; I:1550; II:1550	1200; I:1400; II:2000	1200; I:1400; II:2000	1200; I:1400; II:2000	1200; I:1400; II:2000
Table speed		1~600	1~350	1~250	1~200	1~160	1~120	1~120	1~60	1~60
No. of Ram		1	1	1	1 (2 OPT)	1 (2 OPT)	1 (2 OPT)	1 (2 OPT)	1 (2 OPT)	1 (2 OPT)
Table power	KW	37/45	37/45	37/45	60/75	60/75	60/75	60/75	100	100
Live spindle power (opt)		7.5/11	7.5/11	7.5/11	11/15	11/15	11/15	11/15	11/15	11/15
Milling spindle taper		BT 50	BT 50	BT 50	BT 50	BT 50	BT 50	BT 50	BT 50	BT 50
Tool storage capacity (per Ram)		12	12	12	12	12	12	12	12	12

Model	Unit	VTH-5000ATC	VTH-6000ATC	VTH-7000ATC	VTH-8000ATC
Table size	mm	5000	6000	7000	8000
Max. swing dia.	mm	Ø6400	Ø7400	Ø9000	Ø9000
Max. cutting dia.	mm	Ø5900	Ø6900	Ø8500	Ø8900
Max. cutting height	mm	2100; I:2700; II:3100; III:3500	2600; I:3400; II:3800; III:5000	2600; I:3400; II:3800; III:5000	2600; I:3400; II:3800; III:5000
Max. workpiece weight	kg	100000	150000	250000	300000
X Axis travel	mm	-2350~+3010	-3000~+3510	-4300~+5050	-4300~+5050
Z Axis travel	mm	1500; I:1500; II:2000; III:2000	1500; I:2000; II:2000; III:2500	1500; I:2000; II:2000; III:2500	1500; I:2000; II:2000; III:2500
Crossrail travel	mm	1400; I:2000; II:2400; III:2800	1600; I:2400; II:2800; III:4000	1600; I:2400; II:2800; III:4000	1600; I:2400; II:2800; III:4000
Table speed		5~40	3~25	3~20	3~20
No. of Ram		1 (2 OPT)	1 (2 OPT)	1 (2 OPT)	1 (2 OPT)
Table power	KW	60/84	60/84	100/140	100/140
Live spindle power (opt)		17/22.5	17/22.5	17/22.5	17/22.5
Milling spindle taper		BT 50	BT 50	BT 50	BT 50
Tool storage capacity (per Ram)		16	16	16	16

Standard Features

- Fanuc Oi-T Controller
- 4 Jaws Manual Chuck
- Yv1000 (40"), Yv1200 (49"), Yv1600 (63")
- Dual Speed Gearbox
- Hydraulic Unit
- Coolant Unit
- Pressure Relief Automatic
- Lubrication System
- Air Conditioner For Electrical Cabinet
- Chip Conveyor And Chip Bucket
- Working Lamp
- 5 Station Turret (A Series)
- 12 Positions Tool Magazine(Atc Series)
- 16 Positions Tool Magazine(Atc+C Series)
- Tool Box With Tools
- Operation Manual
- Square Guarding



Turning



Boring



Milling



Drilling



90°drilling



Reaming



Tapping



Grinding

COSMOS: Service Support

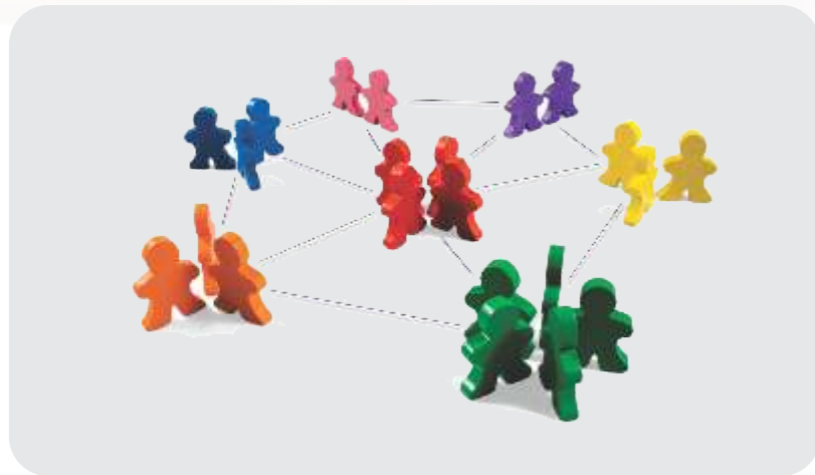
COSMOS as a leading provider of machine tools services is dedicated to enhancing our customer experience at every level of the organization. We do this through providing world class products supported by customer focused services and support in the form of COSMOS Service Line. Our goal is rewarding growth through exceeding the expectations of our customers every day.

Field Service

Qualified machine tool service keeps your business running. Our quick response times with knowledgeable, factory-trained engineers give us a distinct edge in our service capabilities. With our wide service network, our engineers are always a phone call away. May it be preventive maintenance or disaster management our service team has you covered for it all. The Cosmos service team will help maintain your machines for the many years to come.

Training

Get more out of your machines through proper training of your operating team at the COSMOS Training center. On machine training can be conducted giving the user an edge & added expertise on machine usage. Our application, programming, and service training modules will facilitate more efficient usage of your machine. Topics include machine servicing, hands-on operation, and Basic CNC programming.



COSMOS Service line is the first of its kind in the country. Its is a centralized system to maintain & record all service complaints the first calling point for all customers anywhere in India and with completely auto-tracking system for each problem until it is resolved. Once a complain is registered, on the spot troubleshooting is provided by our Sr.Enginers and if unresolved an engineer visit is scheduled.

Service Line No: + 91-9377666555 and E-mail: serviceline@cosmos.in

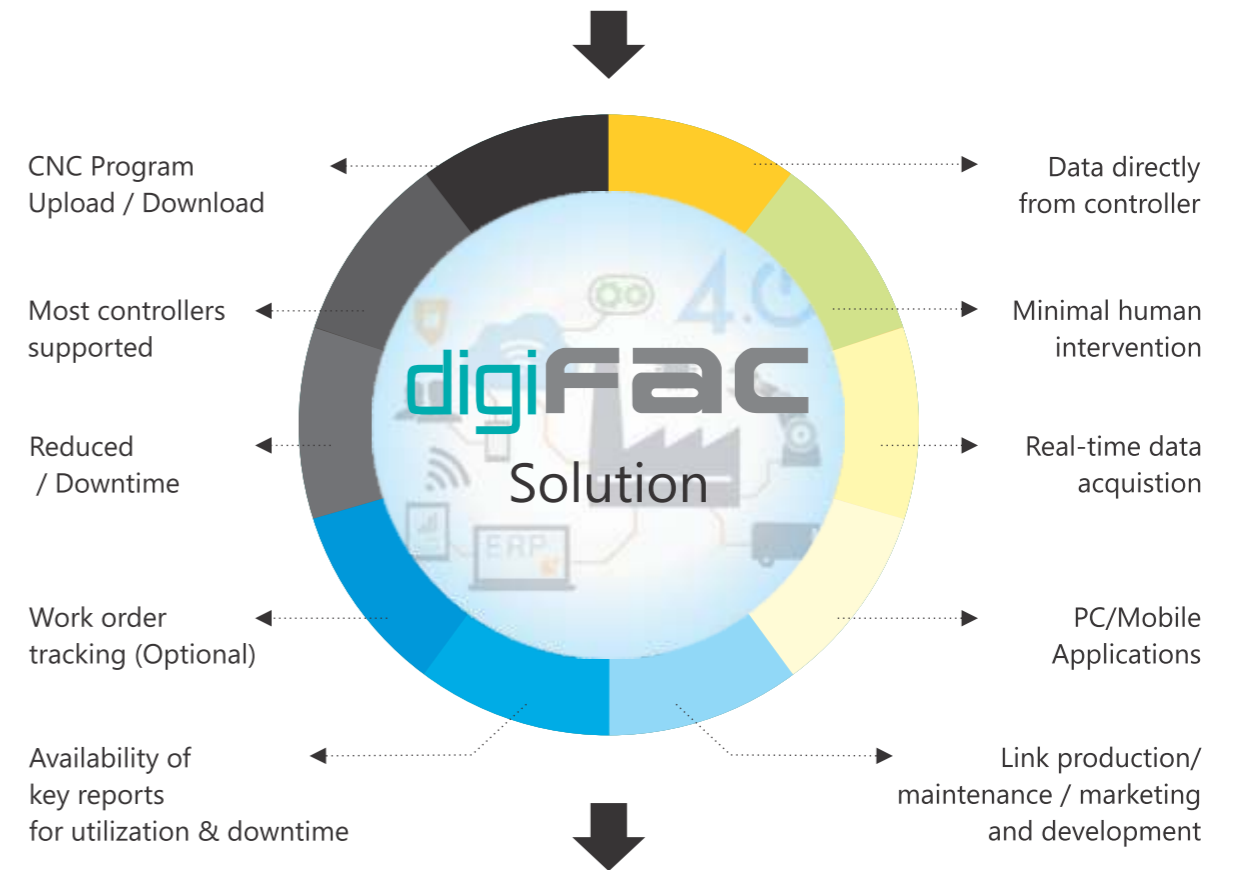


COSMOS: Moving Towards Industry 4.0

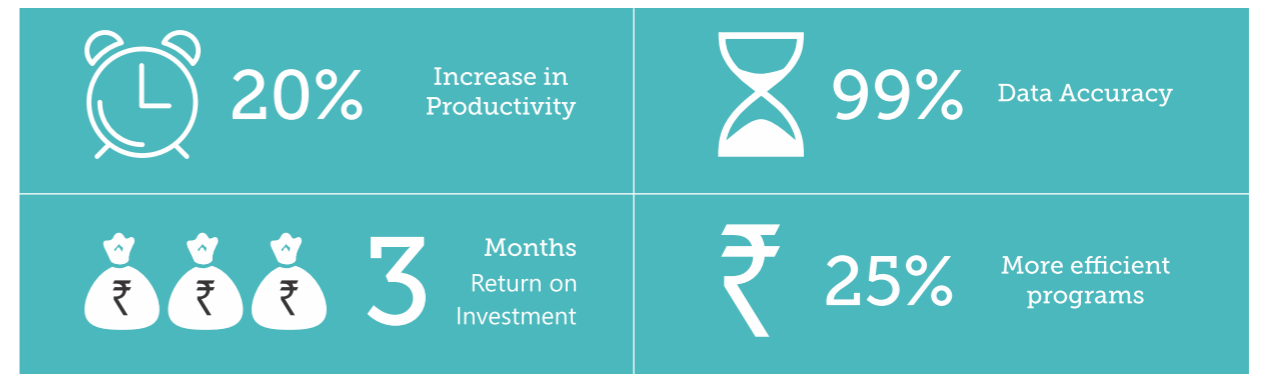
Through A Digital Factory Solution



Problems



Results



Our Complete Product Range

Vertical Machining Center

DTC WITH PALLET CHANGER



DRILL TAP CENTER



HIGH PERFORMANCE VMC



DOUBLE COLUMN MACHINING CENTER



DOUBLE COLUMN MACHINING CENTER



TURRET TYPE VTL



RAM TYPE VTL



Vertical Turning Centers

Horizontal Machining Centers

HORIZONTAL DRILL TAP CENTER



HIGH PERFORMANCE HMC



HEAVY DUTY HMC



HORIZONTAL BORING MACHINE



HIGH PERFORMANCE HTC



HEAVY DUTY HTC



OIL COUNTRY HTC



FLATBED LATHE



Horizontal Turning Center

5-Axis Machining Centers

5-AXIS TRUNNION TYPE



GANTRY TYPE 5-AXIS



5-AXIS UNIVERSAL HEAD TYPE



5-AXIS BRIDGE TYPE



SLIDING HEAD LATHE



MULTI TURRET TURNMILL CENTER



TURNMILL CENTER WITH B-AXIS VARIABLE ANGLE HEAD



TWIN SPINDLE



Multitasking Turnmill Centers