

Solution Satisfaction Smile

A professional double column machining center manufacturer,

With global brand "VISION WIDE", provides wide ranges of CNC milling center according to Component Machining, Wind Power, Solar Energy, Tunnel, Plastics, Automotive, Train, Vessel, and Aerospace.













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VISION WIDE TECH CO., LTD.

Accuracy:

Positioning: P0.012 mm Repeatability: Ps 0.010 mm Spindle thermal compensation 0.02 mm

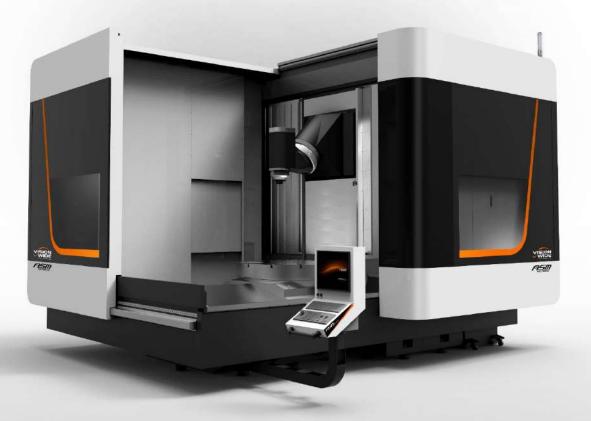
Speedy:

0.3 G Acceleration 40 m/min Rapid traverse 24 m/min Cutting feed rate

Machining:

5-axis universal head Turning and milling 57/75 kW spindle power





ASM, 5-axis universal machining center, is designed for delicate cylindrical components machining featuring high acceleration, rapid feed-rate and synchronized axes machining.

Aesthetic, Safe and Operational Design

- ASM series is inherited the excellent design idea from VW product culture. Now ASM series promotes new CIS of VW with an compact and neat style.
- Large- scale door for easily loading and unloading work piece
- Vision Wide complies with CE standard, offering a safe and comfortable working environment.
- Multiple machining application on aerospace components, tire molds, turbine blades, multiaxial hole diameter, aluminum parts and turning.
- Multi-application on aircraft parts, molds, massive removal of aluminum and drilling



Aircraft engine machining



Tire mold machining



Turning



Multiaxial hole diameter machining

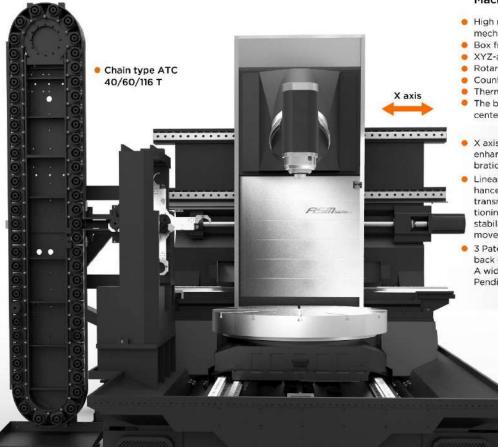


Turbine blades machining



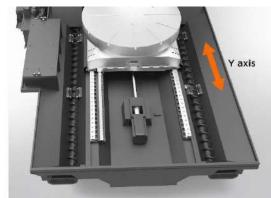
Aluminum machining





Machine Features

- High rigidity and light weight mechanical structure
- Box frame structure on column
- XYZ-axis 10kW direct-driven
- Rotary shafts built-in D.D motor
- Counter-balance on Z axis
- Thermal compensation system
- The best distance between tool center point and B-axis transmission
- X axis: super wide and thick column enhances structural stability, anti-vibration and provide high rigidity base.
- Linear guideway with wide pitch enhances the straightness over full travel, transmission of ball screw and positioning accuracy, moreover, maintain stability of head stock on high speed movement.
- 3 Patent beam guideways, two at the back of saddle and one at the bottom.
 A widened saddle bottom(Patent Pending) advances torsional rigidity.



- Y axis's rigidity increases 30% by roller type guideway and enhances table load and horizontal accuracy of workpiece.
- The rigidity of high-load linear guideways higher than the industry average 40% to provide better cutting load and lifespan.
- Z axis with counter-balance arrangement increases responding speed.
- Symmetric design of Z axis head stock and saddle arrangement can avoid thermal deformation on X and Y.



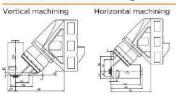
3 axes structure equip oil skimmer



Spindle mechanism

High speed milling spindle ,and composite turning and milling spindle equips high power and high torque to conduct massive removal of aluminum alloy and hard metal.

Stable 5-axis machining





Model	Unit	M21-45°	G30-45°
Tilted range	36	-30~+180	-30~+180
Max speed	rpm	60	30
Min. Division Travel	-	+/-0.001	+/-0.001
Rated Torque	Nm.	908	1611
Max. torque	Nm	1740	3136
Brake torque	Nm	4000	5500

Design Features

A. Built-in backlash-free D.D. motor

B. 45° B axis rotary design: The shortest distance from TCP to structural fulcrum. The minimum interference between spindle and workpiece while machining inner holes.

C. Hi-resolution measure feedback system ensures accuracy performance

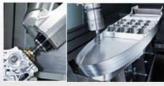
D. ±2° repeatability accuracy, ±5° positioning accuracy

E. Coil thermal protection

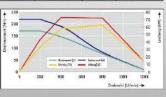
Powerful machining

Mahining material

Titanium alloy · aluminum alloy and aluminum chips massive removed



Spindle model		C5-34-180-5		
Power	57/75 kW	Torque	170/220 Nm	
Speed	10,000 rpm	Tool	HSK-A100	



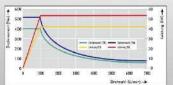
Heavy duty machining

Mahining material

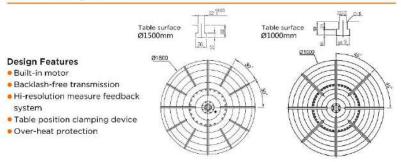
Aluminum alloy · Cast iron · Stainless steel · Ni-Cr alloy · Titanium alloy



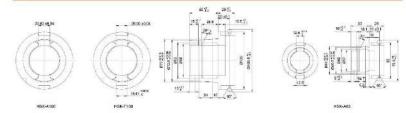
Spindle model Power 42/55 kW		CS-42-238-5		
		Torque	400/525 Nm	
Speed	7,000 rpm	Tool	HSK-A100	



Size of Rotary Work



Tool shank and Pull stud



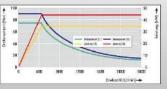
High speed machining

Mahining material

Titanium alloy - aluminum alloy and aluminum chips massive removed



Spin	dle model	CS-34-180		
Power	34/43 kW	Torque	72/91 Nm	
Speed	20,000 rpm	Tool	HSK-A63	



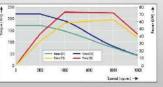
Turning machining

Mahining material

Titanium alloy - aluminum alloy and aluminum chips massive removed



Spindle model		CST-34-180-S		
Power	57/75 kW	Torque	170/220 Nm	
Speed	10,000 rpm	Tool	HSK-T100	





Safe Protection Design

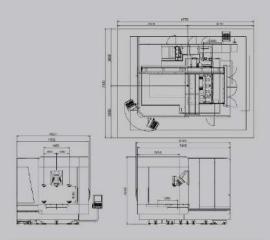
- Auto door lock on while function to prevent opening each door.
- Sheet metal at the tool magazine to protect operators from chips.
- Switchable of ATC from auto mode to manual.
- Enclosed sheet metals with roof protect operators from working area and keep fluid and chips in the machine.



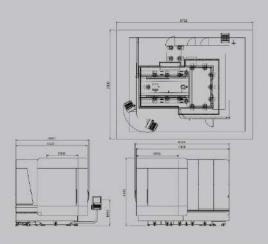
- Split doors on operation side for easily loading workpiece from 3 directions via cranes.
- Provide 500 LUX lightening for safe operation.



Dimension of machine



ASM-1000 / ASM-1000 FD type



ASM-1612 / ASM-1612G / ASM-1612 FD type

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ASM Series

No.	Model	Unit	ASM-1000	ASM-1612	ASM-1612G					
1	Travel									
1-1	X/Y/Z axis	mm	1,000 x 1,050 x 800	1,620 x 1,260 x 1,050	1,620 x 1,260 x 1,05					
1-2	Distance from spnidle center to table (vertical)	mm	100~900	100-1150	100-1150					
1-3	Distance from sphidle center to table (Horizontal)	mm	50~1100	50~1100	50~1100					
1-4	Rapid traverse	m/min	24	24	24					
1-5	Rapid traverse	m/min	40	40	40					
2	Rotary table (milling only)	-		,						
2-1	Table dimension	mm	φ1,000	φ1,500	φ1,500					
2-2	Max. table load	kg	2,000	3,000	3,000					
2-3	Max, table speed	rpm	80	80	80					
2-4	Min. division accuracy		0.001	0.001	0.001					
3	Rotating head									
3-1	Rotating angle		-30~+180	-30~+180	-30-+180					
3-2	Rotating speed	rpm	60	60 +/-0.001	60 +/-0.001					
3-3	Min. division accuracy		+/-0.001							
3-4	Rated torque	Nm	908	908	1,611					
3-5	Max. torque	Nm	1,740	1,740	3,136					
3-6	Braking torque	Nm	4,000	4,000	5,500					
4	pindle (milling only)									
4-1	Spindle speed	Rpm	10,000	10,000	7,000					
4-2	Spindle motor power(\$1/56)	kW	57 / 75	57 / 75	42/55					
4-3	Spindle torque(S1/S6)	Nm	170/220	170/220	400/525					
4-4	Spindle taper		HSK-A100	HSK-A100	HSK-A100					
5	ATC				î î					
5-1	ATC capacity	pcs	40/60/116	40/60/116	40/60/116					
5-2	Max, tool length	mm	φ115 x 500	φ115×500	φ115 x 500					
5-3	Max. tool weight	kg	20	20	20					
6	Other	6 /								
6-1	Power requirement	KVA	130	130	130					
6-2	Pneumatic requirement	kg/cm ²	6	6	6					
6-3	Machine net weight	kg	20,000	32,000	33,000					
6-4	Dimension (LxWxH)	m	8.1 x 7.1 x 4.1	8.75 x 7 x 4.4	8.75 x 7 x 4,4					

	Standard accessory		
1	Siemens 840D SL controller	13	Caterpillar type chip conveyor
2	10,000 rpm HSK-A100 Build-in spindle	14	Air conditioner for electrical cabinet
3	Spindle oil cooler	15	Working lamp
4	Centralized auto lubrication system	16	Operation cycle finish and alarm light
5	Independent lubrication oil collector	17	Movable manual pulse generator
6	Air blast though spindle	18	Footswitch for tool clamping
7	Wash gun and pneumatic interface	19	RJ-45 interface
	Cutting coolant system	20	XYZ-axes absolute travel hardware limit protection
9	40 tools magazine arm type ATC	21	Auto power off
10	enclosed splash guard (with roof)	22	Foundation pads and bolts kits
11	Swiveling arm type operation panel	23	Adjustment tool and tool kits
12	Screw type chip conveyor on table sides	24	Technical manuals

ASM FD Series

No.	Model	Unit	ASM-1000 FD	ASM-1612 FD	
1	Travel				
1-1	X/Y/Z axis	mm	1,000 x 1,050 x 800	1,620 x 1,260 x 1,05	
1-2	Distance from spnidle center to table (vertical)	mm	22-822	22-1072	
1-3	Distance from spnidle center to table (Horizontal)	mm	50~850	50~850	
1-4	Rapid traverse	m/min	24	24	
1-5	Rapid traverse	m/min	40	40	
2	Rotary table (both milling and turning)				
2-1	Table dimension	mm	φ1,000	φ1,500	
2-2	Max. table load	kg	2,000	3,000	
2-3	Max. table speed	rpm	400	400	
2-4	Min. division accuracy	a	0.001	0.001	
3	Rotating head		-		
3-1	Rotating angle	d.	-30+180	-30-+180	
3-2	Rotating speed	rpm	60	60	
3-3	Min. division accuracy	a-	+/-0.001	+/-0.001	
3-4	Rated torque	Nm	908	908	
3-5	Max.torque	Nm	1,740	1,740	
3-6	Braking torque	Nm	4,000	4,000	
4	Spindle (both millling and turning)				
4-1	Spindle speed	Rpm	10,000	10,000	
4-2	Spindle motor power(S1/S6)	kW	57 / 75	57 / 75	
4-3	Spindle torque(S1/S6)	Nm	170/220	170/220	
4-4	Spindle taper		HSK-T100	HSK-T100	
5	ATC				
5-1	ATC capacity	pcs	40/60/116	40/60/116	
5-2	Max tool length	mm	φ115 x 500	φ115×500	
5-3	Max. tool weight	kg	20	20	
6	Other				
6-1	Power requirement	KVA	130	130	
6-2	Pneumatic requirement	kg/cm²	6	6	
6-3	Machine net weight	kg	20,000	32,000	
6-4	Dimension (LxWxH)	m	8.1 x 7.1 x 4.1	8.75 x 7 x 4.4	

	Optional accessory		
1	HEIDENHAIN iTNC640 controller	111	Dual belt type chip conveyor
2	20,000rpm HSK-A63 Build-in spindle	12	Chip cart
3	10,000rpm HSK-T100 Build-in spindle	13	XYZ -axes linear scale
4	7,000 rpm HSK-A100 Build-in spindle	14	Auto tool length measurement
5	60 / 116 tool magazine and arm type ATC	15	Auto work piece measurement
6	Coolant through spindle 20 / 60 bars	16	RS232 interface
7	The interface of coolant through spindle	17	Transformer
	Oil skimmer	18	Transformer with voltage stabilizer
9	Oil mist cooling device (MQL)	19	Chip removal by flush on table
10	Helically bladed screw conveyor on table sides		

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