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Vertical Machining Center

General

Wide range production with verify level performance provide multiple choice for suitable model of application. Stand in customer's consideration, Akira Seiki machine performance value can stand the test of time.



JR/SR

Primary Selection
For General

Model

JR/SR-Performa Junior

JR / SR2 / SR3
JRXP / SR2XP / SR3XP
SR32XP / SR42XP / SR52XP / SR45XP /
SR55XP

Model

V-Performa Classic Extra Performance

V2 / V2.5 / V3 / V4 / V5 / V4.5 / V5.5 / V6 / V8 / V10
V2XP / V2.5XP / V3XP / V4XP / V5XP
V4.5XP / V5.5XP / V6XP / V8XP / V10XP

Model

SV-Super Vertical

SV550 / SV760 / SV815 / SV1050
SV1300 / SV1150 / SV1350 / SV1630
SV2060 / SV2600

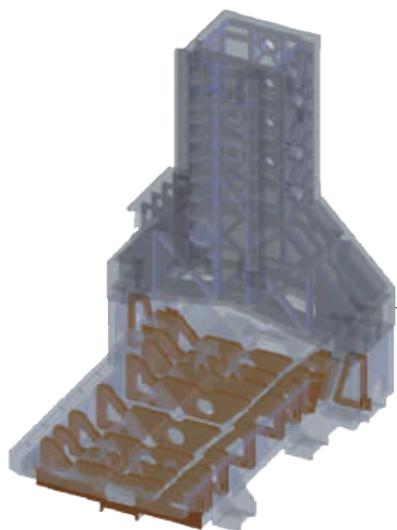
Model

HV-A-Superior Speed Heavy Duty

HV4.5A / HV5.5A / HV6A / HV8A
HV10A

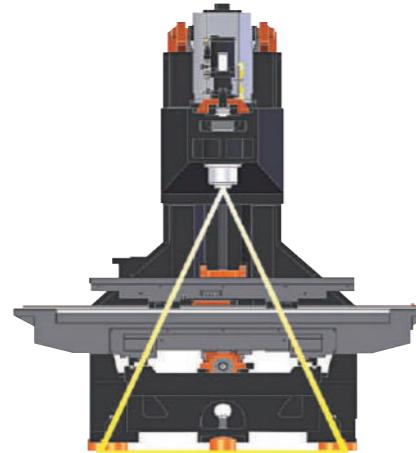
Rigid Physical Foundation

Akira Seiki VMC casting are steady to perform outstanding dynamic accuracy and vibration absorption while rapid cutting.



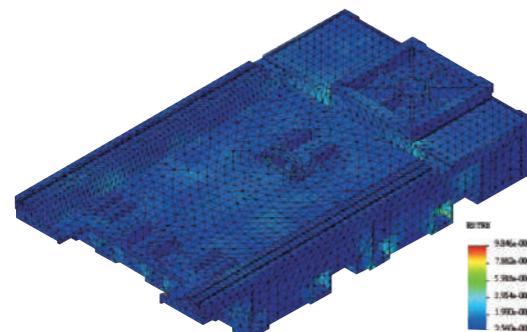
Reinforced Frame Construction

Internal ribs of each keycasting elements are enforced for deformation-resistant and anti-damping vibration.



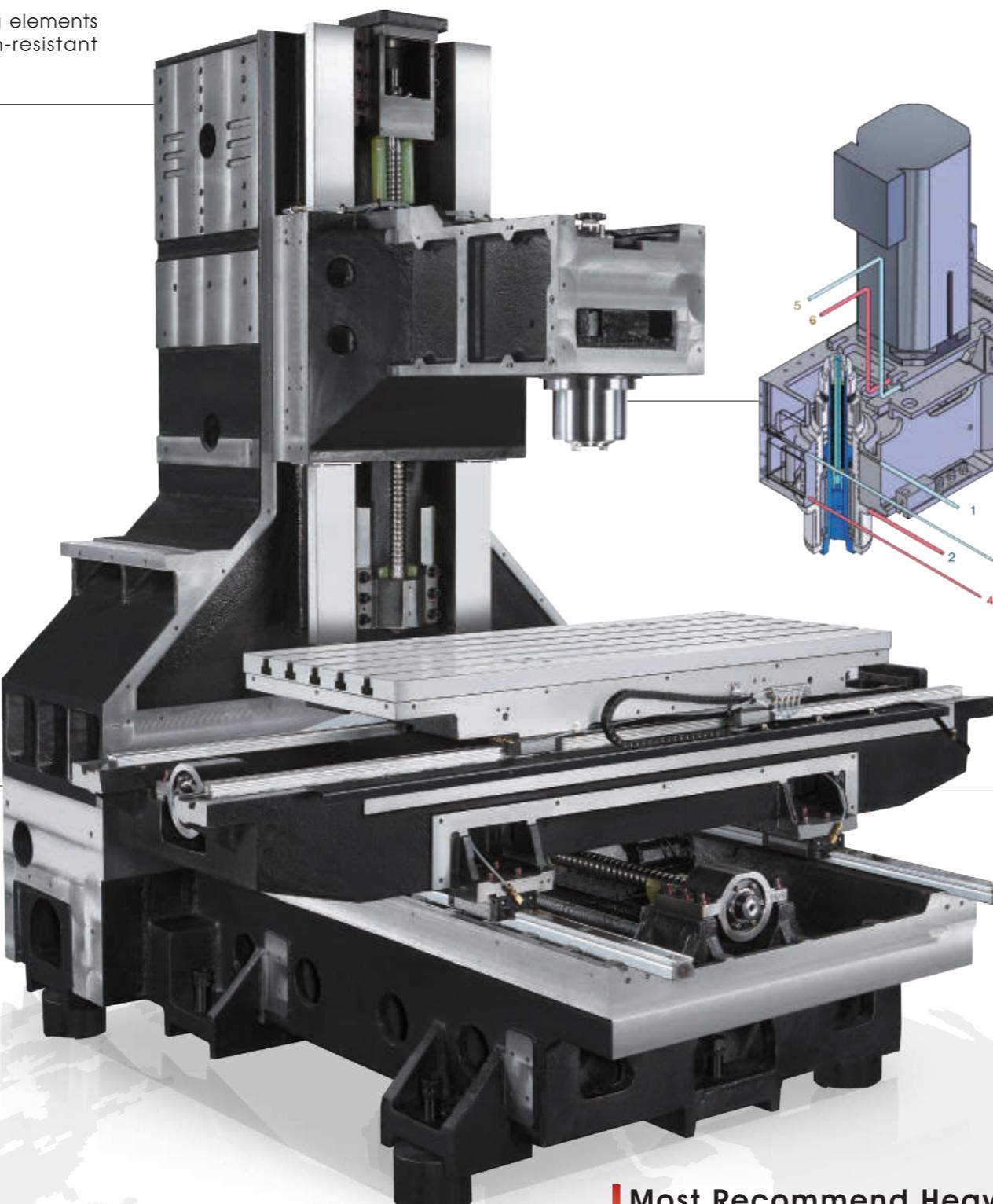
Golden Triangular Frame

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



Scientific Technology Support

Digital FEA (Finite Element Analysis) scientifically demonstrates rigid structure and approves excellent dynamic accuracy and vibration absorb by advanced digital assay tool.



Meehanite High Quality Casting Iron

Assures permanent rigidity and accuracy for each Akira Seiki machine casting frame by the authorized Meehanite foundries.



A 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 540mm)

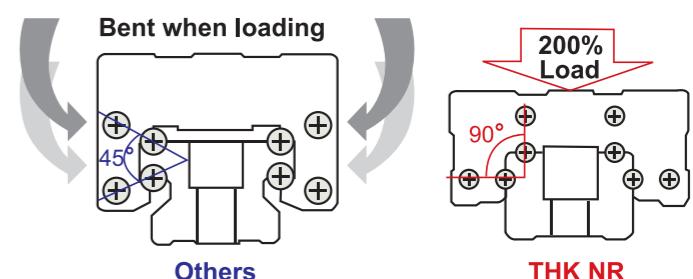
Head Stock Thermal Control

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



Double-anchored Ballscrew

Enhance high speed cutting rigidity and 100% laser track and ball bar collaboration test to ensure geometry accuracy.



(except JR/SR series)
(V2/V2.5/SV550/SV760 Z axis employ Tsubaki linear guide way.)

Most Recommend Heavy Load Linear Guide Way (THK NR Type)

Least friction coefficient and preloading for clearance-free between moving surface, precise ball linear guide ways are most compatible for fast movement and high positioning and repeatability accuracy.

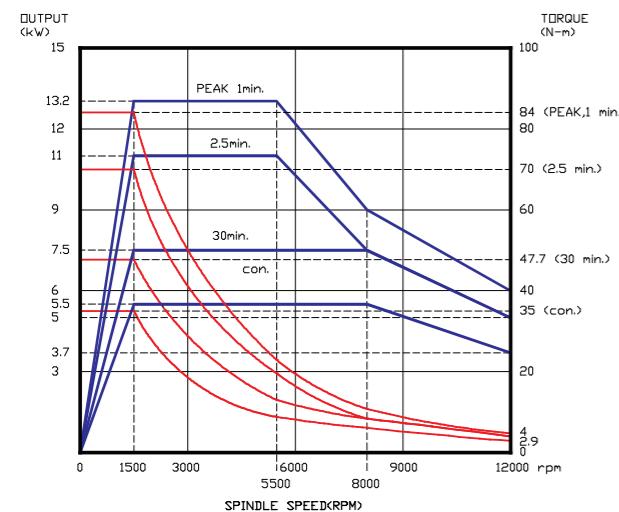
Spindle Feature

High precision NSK 4+2 bearings support the cutting reaction and keep longer running without the damage of burning with using high speed and high rigidity spindle.

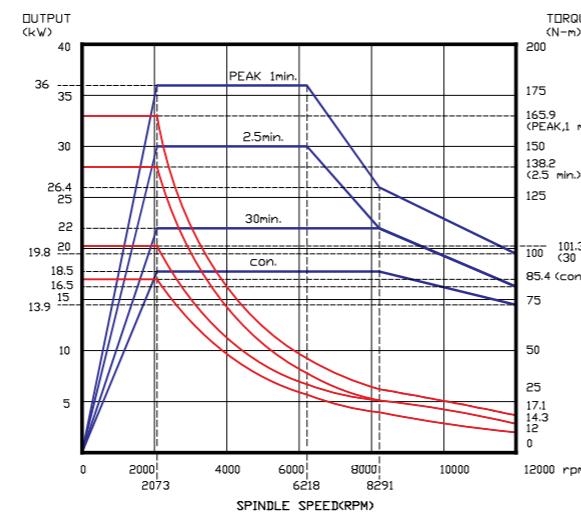


Inherit high speed machining conception, Akira Seiki V/SV series is capable of high speed heavy cutting by employing high output spindle motor with max 42HP/117.3 N·m 12k/15k rpm spindle which can reduce machining time dramatically.

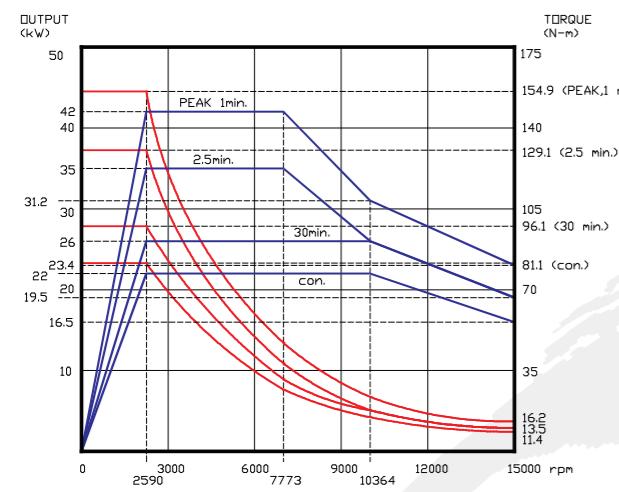
JR/SR series



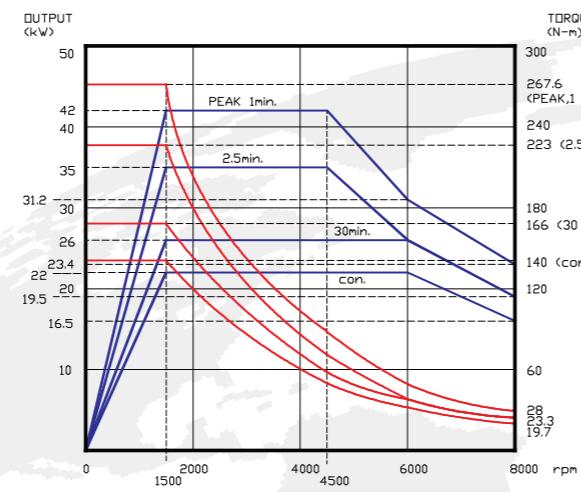
V series except V2 / V2.5



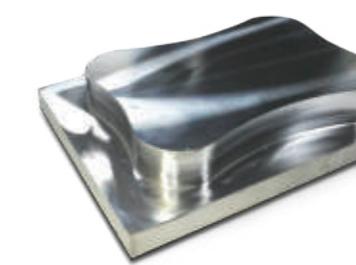
SV series except SV550 / SV760



HV-A series



Cutting Application



Soft Material

- Material : A6061 Aluminum
- Face Mill Cutter: 50 mm
- Spindle Speed: 10,500 rpm
- Cutting Feed: 9,525 mm/min
- Width : 28.4 mm
- Depth: 5.3 mm

Removal Rate: 1435 cc/min

- End Mill Cutter: 19.5 mm
- Spindle Speed: 11,500 rpm
- Cutting Feed: 8,255 mm/min
- Width: 12 mm
- Depth: 12.5 mm

Removal Rate: 1238 cc/min

Hard Material

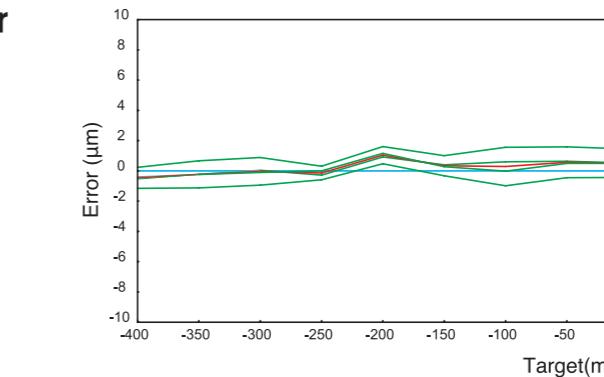
- Material: S45C Steel (JIS), CK45(DIN), 1045(ASTM)
- Face Mill Cutter: 50 mm
- Spindle Speed: 4,000 rpm
- Cutting Feed: 12,827 mm/min
- Width: 28 mm
- Depth: 1.27mm

Removal Rate: 456 cc/min

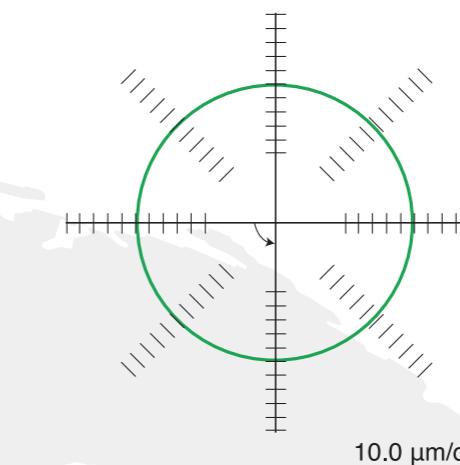
- End Mill Cutter: 50 mm
- Spindle Speed: 4,000 rpm
- Cutting Feed: 2,032 mm/min
- Width : 4.1 mm
- Depth : 17 mm

Removal Rate: 142 cc/min

Laser



Ball Bar



*Cutting test results indicated in this catalog are provided as examples.

The measured results may not be obtained, due to differences in cutting conditions and environmental conditions.

• VDI 3441 - linear Machine : V2.5XP

U average: 0.193
Ps average: 1.454
Repeatability, Ps m: 1.922

• Axis : Y

Reversal error, U ma: 0.620
Position accuracy, P: 2.761
Position error, Pa: 1.500

• Dynamic Ballbar Machine: V2.5XP

Backlash (μm)	Lateral Play (μm)
X 0.0 0.3	X 0.1 0.0
Y 0.7 0.1	Y 0.5 -0.4
Reversal Spikes (μm)	Cyclic Error (μm)
X 1.7 2.3	X 0.4 0.3
Y 0.9 1.3	Y 0.6 0.6
Other Feature	
Servo mismatch	0.02 ms
Squareness	-0.6 μm/m
Straightness X	1.9 μm
Straightness Y	-0.8 μm
Scaling mismatch	-2.0 μm
Circularity	4.1 μm

AKIRA M_i845 Control

AKIRA M_i845 coordinate the CNC digital and world leader drives system.
High-resolution servo stabilize precise axis positioning for high complex and accuracy jobs.

	JR/SR	V/HV-A	SV
CPU Processor / Base Specification			
RISC CPU Processor	RISC 64 bit	RISC 64 bit	RISC 64 bit
Maximum program capacity	500KB (1280M)	500KB (1280M)	500KB (1280M)
Extended workpiece coordinate system selection (54/102 sets)	48 sets	48 sets	300 sets
Max. variable number	700 sets	700 sets	800 sets
Tool offset amount	400 sets	400 sets	999 sets
Display Unit Related Specification			
10.4 inch color display unit	X	●	●
High Speed & High Accuracy Machining Control Related Functions			
High accuracy control 1 (G8P1/G61.1)	●	●	●
High speed & high accuracy machining control model (G05.1Q1)	(16.8 M/min)	(16.8 M/min)	(16.8 M/min)
High speed & high accuracy machining control model (G05P10000)	(33.7 M/min)	(33.7 M/min)	(33.7 M/min)
Fine spindle interpolation (G05. 1Q2)	X	X	●
SSS control (super-smooth-surface)	▲	▲	●
Backlash compensation	●	●	●
Ballscrew thermal expansion compensation (hardware needed)	●	●	●
Language Display & Graphic Check Related Function			
Display language selection	17	17	17
3D solid program check function	●	●	●
Graphic check and graphic trace	●	●	●
Operation And Programming Support Related Functions			
Workpiece position measurement	●	●	●
Workpiece rotation measurement	●	●	●
Buffer correction	●	●	●
Collation stop	●	●	●
Verification stop	●	●	●
Program restart after NC power shut down	●	●	●
Tool position offset (G45-G48)	●	●	●
Special fixed cycle (G12/G13/G34/G35/G36/G37.1/G75)	●	●	●
Scaling function (G50/G51)	●	●	●
Coordinated rotation by program (G68/G69) and parameter	●	●	●
Deep hole synchronous tapping (Could return to R point)	●	●	●
High speed synchronous tapping (OMR-DDC) (Could return to R point)	●	●	●
High speed DI/OD refresh cycle	●	●	●
Multi-steps G00 rapid acceleration/deceleration	●	●	●
Mirror image by parameter setting external input and G code (G50.1/G51.1)	●	●	●
Polar coordinate command (G15/G16)	●	●	●
Cylindrical interpolation	●	●	●
Spiral/conical interpolation	●	●	●
Front IC card mode	●	●	●

*Please contact with your local distributor for the further information, those specs. and value based on AKIRA Mi845 Controller.

AKIRA M_i845 Control High Achievement And Easy Operation For Machining Efficiency



- Powerful **64bit CPU** incorporate the fastest-ever computation processions and program scanning.
- Full **look ahead up to 500 blocks** and **G05P10000 High Speed and High Accuracy Control** allow contouring rapid and smoother motion.
- **5120M (2MB) initial program memory** is available as the largest industrial NC program stored capability (option)
- Full **Graphic Function** including simulate run, tool path check and graphic scaling the same coordinate.
- 3 M-codes In the same line achieve **least code-code pause** for operation efficiency.
- T-code and M-code In the same line Is readable such as **M6TX, TXM6 or TX M6**.
- Simple to correct 3 level alarm condition within same page, no inconvenience of forth and back viewing.
- **Program Reserver** available to adapt flash memory card & Ethernet connection.
- High compatibility to Fanuc control programming.
- **One-Button Features** ease the often used functions instead of multi-steps procedure. Only by one-button command to complete

TOOL
MEASURE

NEXT
TOOL

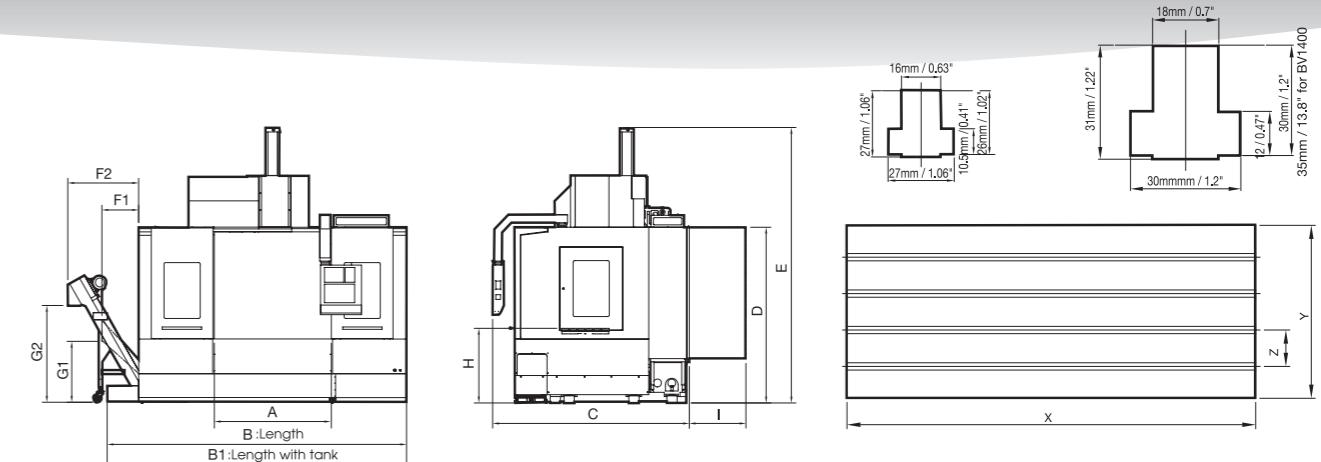
TOOL
1

RESTORE
ATC

F3

F4

Foundation



	Door Open	Length		Width	Ele. Door Open	Max Height	Chip Screw Length	Chip Conveyor Length	Chip Screw Height	Conveyor	Floor to Table	Ele Door Width	T-Slot	Table Length	Table Width	Table Pitch
	A	B	B1	C	D	E	F1	F2	G1	G2	H	I	T	X	Y	Z
JR/SR Series																
JR	700	1900	1900	1935	1770	2500	500	945	748	800	820	550	16	560	380	80
SR2	700	1900	1900	1935	1770	2500	500	945	748	800	820	550	16	700	380	80
SR3	880	2100	2100	1935	1770	2500	500	945	748	800	830	550	16	910	380	80
V Series																
V2 / V2XP	770	1900	1900	2200	1945	2640	500	945	750	800	790	550	18	700	400	80
V2.5 / V2.5XP	940	2200	2200	2200	1945	2640	500	945	750	800	790	550	18	910	400	80
SR32XP / V3 / V3XP	880	2500	2900	2240	2120	3130	560	800	755	850	895	750	18	950	480	80
SR42XP / V4 / V4XP	1260	2900	3300	2240	2120	3130	470	900	755	850	895	750	18	1200	480	80
SR52XP / V5 / V5XP	1510	3400	3800	2240	2120	3130	470	800	755	850	930	750	18	1450	480	80
SR45XP / V4.5 / V4.5XP	1140	3000	3400	2495	2200	3450	450	800	770	850	935	750	18	1300	600	100
SR55XP / V5.5 / V5.5XP	1460	3400	3800	2495	2210	3450	470	800	770	850	955	750	18	1500	600	100
V6 / V6XP	1780	4300	4300	3525	2195	3385	500	800	680	850	1020	550	18	1750	800	125
V8 / V8XP	2190	4950	4950	3525	2195	3385	500	800	680	850	1070	550	18	2150	800	125
V10 / V10XP	2740	6400	6400	3960	2115	3330	520	850	745	850	1100	550	18	2750	950	125
SV Series																
SV550	770	1900	2100	2200	1945	2640	-	945	-	800	790	550	18	700	400	80
SV760	940	2200	2400	2200	1945	2640	-	945	-	800	790	550	18	910	400	80
SV815	880	2500	2900	2240	2120	3130	-	800	-	850	895	750	18	950	480	80
SV1050	1260	2900	3300	2240	2120	3130	-	900	-	850	895	750	18	1200	480	80
SV1300	1510	3400	3800	2240	2120	3130	-	800	-	850	930	750	18	1450	480	80
SV1150	1140	3000	3400	2495	2210	3450	-	800	-	850	935	750	18	1300	600	100
SV1350	1460	3400	3800	2495	2210	3450	-	800	-	850	955	750	18	1500	600	100
SV1630	1780	4300	4300	3400	2195	3385	-	800	-	850	1020	550	18	1750	800	125
SV2060	2190	4950	4950	3400	2195	3385	-	800	-	850	1070	550	18	2150	800	125
SV2600	2740	6200	6400	3960	2115	3330	-	850	-	850	1100	550	18	2750	950	125
HV-A Series																
HV4.5A	1140	3000	3400	2495	2210	3450	450	800	770	850	935	750	18	1300	600	100
HV5.5A	1460	3400	3800	2495	2210	3450	470	800	770	850	955	750	18	1500	600	100
HV6A	1780	4300	4300	3525	2195	3385	500	800	680	850	1020	550	18	1750	800	125
HV8A	2190	4950	4950	3525	2195	3385	500	800	680	850	1070	550	18	2150	800	125
HV10A	2740	6200	6400	3960	2115	3330	520	850	745	850	1100	550	18	2750	950	125

*Please contact with your local distributor for the further information, those specs. and value based on AKIRA Mi845 Controller.

Specification

JR / SR Series



Primary Selection For General

	JR	SR2	SR3	JR XP	SR2 XP	SR3 XP	SR32 XP	SR42 XP	SR52 XP	SR45 XP	SR55 XP	
CONTROL SYSTEM	AKIRA Mi845 (Fanuc G code compatible)						AKIRA Mi845 (Fanuc G code compatible)					
TRAVEL												
X Axis Travel	mm/inch	410 / 16.1	550 / 21.7	762 / 30	410 / 16.1	550 / 21.7	762 / 30	815 / 32.1	1050 / 41.3	1300 / 51.2	1150 / 45.3	1350 / 53
Y Axis Travel	mm/inch	430 / 16.9	430 / 16.9	430 / 16.9	430 / 16.9	430 / 16.9	430 / 16.9	540 / 21.3	540 / 21.3	540 / 21.3	640 / 25	640 / 25
Z Axis Travel	mm/inch	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1	560 / 22	560 / 22	560 / 22	660 / 26	660 / 26
Spindle nose to table surface	mm/inch	75~535 / 3~21	75~535 / 3~21	75~535 / 3~21	75~535 / 3~21	75~535 / 3~21	75~535 / 3~21	75~635 / 3~25	75~635 / 3~25	75~635 / 3~25	100~760 / 4~30	100~760 / 4~30
Spindle center to column cover	mm/inch	435 / 17	435 / 17	435 / 17	435 / 17	435 / 17	435 / 17	550 / 21.7	550 / 21.7	550 / 21.7	640 / 25	640 / 25
TABLE												
Table size (L x W)	mm/inch	560 x 380 / 22 x 15	700 x 380 / 28 x 15	910 x 380 / 36 x 15	560 x 380 / 22 x 15	700 x 380 / 28 x 15	910 x 380 / 36 x 15	950 x 480 / 37.4 x 19	1200 x 480 / 47.2 x 19	1450 x 480 / 57 x 19	1300 x 600 / 51.1 x 23.6	1500 x 600 / 59 x 23.6
T slot	mm/inch	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	16 x 80 x 4 slots / 0.63 x 3.15 x 4 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots
Max. Loading	kgs/lbs	432 / 952	576 / 1270	792 / 1746	432 / 953	576 / 1270	792 / 1746	1080 / 2381	1176 / 2593	1296 / 2857	1560 / 3440	1800 / 3968
Standard Loading	kgs/lbs	360 / 794	480 / 1058	660 / 1455	360 / 794	480 / 1058	660 / 1455	900 / 1984	980 / 2161	1080 / 2381	1300 / 2867	1500 / 3307
SPINDLE												
Max. Motor Power (Peak)	HP	12	15	15	12	15	15	18	18	18	18	18
Max. Speed	rpm	9,000	9,000	9,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Spindle Taper	ISO 40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40					
FEED												
Rapid feed X / Y / Z	M/min ipm	30 / 30 / 24 1181 / 1181 / 945	30 / 30 / 24 1181 / 1181 / 945	30 / 30 / 24 1181 / 1181 / 945	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984
Cutting feed X / Y / Z	M/min ipm	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394
ACCURACY												
Positioning	mm/inch	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039
Repeatability	mm/inch	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012
ATC												
Tool Storage Arm ATC	-	16T	20T	20T	16T	20T	20T	24T	24T	24T	24T	24T
Max. Tool Diameter	mm/inch	75 / 3	75 / 3	75 / 3	75 / 3	75 / 3	75 / 3	80 / 3.2	80 / 3.2	80 / 3.2	80 / 3.2	80 / 3.2
Max. Tool Diameter (without neighbor tool)	mm/inch	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9
Max. Tool Length	mm/inch	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8
Max. Tool Weight	kgs/lbs	7/15	7/15	7/15	7/15	7/15	7/15	7/15	7/15	7/15	7/15	7/15
Tool to Tool Time(60hz)	sec.	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
GENERAL												
Tank Capacity	liter/gal	150 / 39.6	150 / 39.6	150 / 39.6	150 / 39.6	150 / 39.6	150 / 39.6	350 / 92.5	350 / 92.5	400 / 105.7	350 / 92.5	400 / 105.7
Chip Disposal	-	Drawer	Drawer	Drawer	Chip Screw	Chip Screw	Chip Screw	Chip Screw	Chip Screw	Chip Screw	Chip Screw	Chip Screw
Air Pressure Requirement	Mpa/psi	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5
Power Requirement	KVA	20	20	20	20	20	20	30	30	30	30	30
Floor Space	mm/inch	1900 x 1935 / 75 x 76	1900 x 1935 / 75 x 76	2100 x 1935 / 83 x 76	2400 x 1935 / 94 x 76	2400 x 1935 / 94 x 76	2600 x 1935 / 102 x 76	3020 x 2240 / 119 x 88	3370 x 2240 / 133 x 88	3870 x 2240 / 154 x 88	3450 x 2495 / 136 x 98	3870 x 2495 / 154 x 98
Weight	kgs/lbs	2850 / 6283	3250 / 7165	3480 / 7672	3202 / 7059	3420 / 7539	3650 / 8046	4900 / 10805	5800 / 12790	6600 / 14553	7810 / 17218	8110 / 17879

*Please contact with your local distributor for the further information, those specs. and value based on AKIRA Mi845 Controller.

Specification

V Series

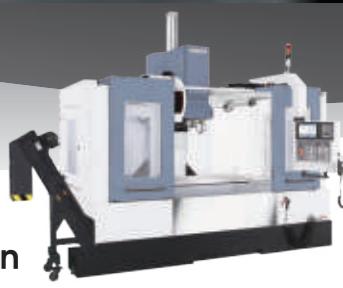
The Faster Road To Fine Finished



		V2	V2.5	V3	V4	V5	V4.5	V5.5	V6	V8	V10		
		V2 XP	V2.5 XP	V3 XP	V4 XP	V5 XP	V4.5 XP	V5.5 XP	V6 XP	V8 XP	V10 XP		
CONTROL SYSTEM	AKIRA M845 (Fanuc G code compatible)						AKIRA M845 (Fanuc G code compatible)						
TRAVEL							TRAVEL						
X Axis Travel	mm/inch	550 / 21.7	760 / 30	815 / 32.1	1050 / 41.3	1300 / 51.2	1150 / 45.3	1350 / 53	1630 / 64.2	2060 / 81.1	2600 / 102.3		
Y Axis Travel	mm/inch	445 / 17.5	445 / 17.5	540 / 21.3	540 / 19.8	540 / 21.3	640 / 25	640 / 25	850 / 33.5	850 / 33.5	1030 / 40.6		
Z Axis Travel	mm/inch	520 / 20.5	520 / 20.5	560 / 22	560 / 22	560 / 22	660 / 26	660 / 26	815 / 32	815 / 32	815 / 32		
Spindle nose to table surface	mm/inch	75~595 / 3~23.4	75~595 / 3~23.4	75~635 / 3~25	75~635 / 3~25	75~595 / 3~25	100~760 / 4~30	100~760 / 4~30	100~915 / 4~36	100~915 / 4~36	100~915 / 4~36		
Spindle center to column cover	mm/inch	460 / 18	460 / 18	550 / 21.7	550 / 21.7	550 / 21.7	640 / 25	640 / 25	865 / 34	865 / 34	1050 / 41.3		
TABLE							TABLE						
Table size (L x W)	mm/inch	700 x 400 / 27.6 x 15.8	910 x 400 / 35.8 x 15.8	950 x 480 / 37.4 x 19	1200 x 480 / 47.2 x 19	1450 x 480 / 57 x 19	1300 x 600 / 51.1 x 23.6	1500 x 600 / 59 x 23.6	1750 x 800 / 69 x 31.5	2150 x 800 / 84.7 x 31.5	2750 x 950 / 108.2 x 37.4		
T slot	mm/inch	18 x 80 x 4 slots / 0.7 x 3.15 x 4 slots	18 x 80 x 4 slots / 0.7 x 3.15 x 4 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 slots	18 x 125 x 7 slots / 0.7 x 4.9 x 7 slots		
Max. Loading	kgs/lbs	720 / 1588	960 / 2116	1080 / 2380	1176 / 2592	1296 / 2857	1560 / 3439	1800 / 3968	2760 / 6085	3240 / 7142	4320 / 7936		
Standard Loading	kgs/lbs	600 / 1323	800 / 1764	900 / 1984	980 / 2160	1080 / 2381	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	3600 / 6614		
SPINDLE							SPINDLE						
Max. motor power (Peak)	HP	V = 20	XP = 22	V = 20	XP = 22	V = 30	XP = 35	V = 30	XP = 35	V = 30	XP = 35	V = 30	XP = 35
Max. Speed	rpm	10,000	12,000	10,000	12,000	10,000	12,000	10,000	12,000	10,000	12,000	10,000	12,000
Spindle Taper	ISO 40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	
FEED							FEED						
Rapid feed X / Y / Z	M/min ipm	40 / 40 / 30 1574 / 1574 / 1181	40 / 40 / 30 1574 / 1574 / 1181	40 / 40 / 25 1574 / 1574 / 984	40 / 40 / 25 1574 / 1574 / 984	40 / 40 / 25 1574 / 1574 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984	30 / 30 / 25 1181 / 1181 / 984		
Cutting feed X / Y / Z	M/min ipm	44 / 44 / 36 1732 / 1732 / 1417	44 / 44 / 36 1732 / 1732 / 1417	44 / 44 / 25 1732 / 1732 / 984	44 / 44 / 25 1732 / 1732 / 984	44 / 44 / 25 1732 / 1732 / 984	33 / 33 / 25 1299 / 1299 / 984	33 / 33 / 25 1299 / 1299 / 984	33 / 33 / 25 1299 / 1299 / 984	33 / 33 / 25 1299 / 1299 / 984	33 / 33 / 25 1299 / 1299 / 984		
18 / 18 / 18 709 / 709 / 709	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394	10 / 10 / 10 394 / 394 / 394		
24 / 24 / 24 945 / 945 / 945	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 10 472 / 472 / 394	12 / 12 / 12 472 / 472 / 472	12 / 12 / 12 472 / 472 / 472	12 / 12 / 12 472 / 472 / 472	12 / 12 / 12 472 / 472 / 472	12 / 12 / 12 472 / 472 / 472	12 / 12 / 12 472 / 472 / 472		
ACCURACY							ACCURACY						
Positioning	mm/inch	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.015 / 0.00059	0.015 / 0.00059	0.015 / 0.00059		
Repeatability	mm/inch	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020		
ATC							ATC						
Tool Storage Arm ACT	-	28T	28T	28T	28T	28T	28T	28T	28T	28T	28T		
Max. Tool Diameter	mm/inch	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6		
Max. Tool Diameter (without neighbor tool)	mm/inch	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1		
Max. Tool Length	mm/inch	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8		
Max. Tool Weight	kgs/lbs	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15		
Tool to Tool Time (60hz)	sec.	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2		
GENERAL							GENERAL						
Tank Capacity	liter/gal	250 / 66	250 / 66	350 / 92.5	350 / 92.5	400 / 105.7	350 / 92.5	400 / 105.7	640 / 169	700 / 185	900 / 237.8		
Chip Disposal	-	Drawer	Drawer	Drawer	Drawer	Drawer	Drawer	Drawer	Drawer	Drawer	Drawer		
Air Pressure Requirement	Mpa/psi	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5		
Power Requirement	KVA	20	20	30	30	30	30	30	30	30	30		
Floor Space	mm/inch	1900 x 2200 / 75 x 87 2400 x 2200 / 94.5 x 87	2200 x 2200 / 87 x 87 2700 x 2200 / 106 x 87	2900 x 2240 / 114 x 88 3020 x 2240 / 119 x 88	3300 x 2240 / 130 x 88 3370 x 2240 / 133 x 88	3800 x 2240 / 146 x 88 3870 x 2240 / 153 x 88	3400 x 2495 / 134 x 98 3450x 2495 / 136 x 98	3800 x 2495 / 150 x 98 3870 x 2495 / 152 x 98	4300 x 3525 / 169 x 139 4730 x 3540 / 186 x 139	4950 x 3525 / 195 x 139 5450 x 3540 / 215 x 139	6400 x 3950 / 252 x 156 6400 x 3950 / 252 x 156		
Weight	kgs/lbs	3930 / 8664 4150 / 9149	4180 / 9215 4400 / 9700	5700 / 12566 6000 / 13227	6600 / 14550 6900 / 15211	7400 / 16314 7700 / 16975	7810 / 17218 8110 / 17879	8110 / 17879 8410 / 18540	12300 / 27116 12600 /				

Specification

SV Series



Ever Faster Cut Than Your expectation

		SV550	SV760	SV815	SV1050	SV1300	SV1150	SV1350	SV1630	SV2060	SV2600
CONTROL SYSTEM		AKIRA Mi845					AKIRA Mi845				
TRAVEL											
X Axis Travel	mm/inch	550 / 21.7	760 / 30	815 / 32	1050 / 41.3	1300 / 51.2	1150 / 45.3	1350 / 53	1630 / 64.2	2060 / 81.1	2600 / 102.3
Y Axis Travel	mm/inch	445 / 17.5	445 / 17.5	540 / 21.3	540 / 21.3	540 / 21.3	640 / 25	640 / 25	850 / 33.5	850 / 33.5	1030 / 40.6
Z Axis Travel	mm/inch	520 / 20.5	520 / 20.5	560 / 22	560 / 22	560 / 22	660 / 26	660 / 26	815 / 32	815 / 32	815 / 32
Spindle nose to table surface	mm/inch	75~595 / 3~23.4	75~595 / 3~23.4	75~635 / 3~25	75~635 / 3~25	75~635 / 3~25	100~760 / 4~30	100~760 / 4~30	100~915 / 4~36	100~915 / 4~36	100~915 / 4~36
Spindle center to column cover	mm/inch	460 / 18	460 / 18	550 / 21.7	550 / 21.7	550 / 21.7	640 / 25	640 / 25	865 / 34	865 / 34	1050 / 41.3
TABLE											
Table size (L x W)	mm/inch	700 x 400 / 27.6 x 15.8	910 x 400 / 35.8 x 15.8	950 x 480 / 37.4 x 19	1200 x 480 / 47.2 x 19	1450 x 480 / 57 x 19	1300 x 600 / 51.1 x 23.6	1500 x 600 / 59 x 23.6	1750 x 800 / 69 x 31.5	2150 x 800 / 84.7 x 31.5	2750 x 950 / 108.2 x 37.4
T slot	mm/inch	18 x 80 x 4 slots / 0.7 x 3.15 x 4 slots	18 x 80 x 4 slots / 0.7 x 3.15 x 4 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 slots	18 x 125 x 7 slots / 0.7 x 4.9 x 7 slots
Max. Loading	kgs/lbs	720 / 1588	960 / 2117	1080 / 2380	1176 / 2592	1296 / 2857	1560 / 3439	1800 / 3968	2760 / 6085	3240 / 7142	3600 / 7937
Standard Loading	kgs/lbs	600 / 1323	800 / 1764	900 / 1984	980 / 2160	1080 / 2381	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	3000 / 6614
SPINDLE											
Max. motor power (Peak)	HP	25	25	42	42	42	42	42	42	42	42
Max. Speed	rpm	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Spindle Taper	ISO 40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40					
Method of Spindle Chilling	-	Oil chilling	Oil chilling	Oil chilling	Oil chilling	Oil chilling					
FEED											
Rapid feed X/Y/Z	M/min ipm	48 / 48 / 36 1890 / 1890 / 1417	48 / 48 / 36 1890 / 1890 / 1417	48 / 48 / 36 1890 / 1890 / 1417	48 / 48 / 36 1890 / 1890 / 1417	48 / 48 / 36 1890 / 1890 / 1417	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	30 / 30 / 25 1181 / 1181 / 984
Cutting feed X/Y/Z	M/min ipm	24 / 24 / 24 945 / 945 / 945	24 / 24 / 24 945 / 945 / 945	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394	15 / 15 / 10 591 / 591 / 394
ACCURACY											
Positioning	mm/inch	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.01 / 0.00039	0.015 / 0.00059	0.015 / 0.00059	0.015 / 0.00059
Repeatability	mm/inch	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020
ATC											
Tool Storage Arm ATC	-	28T	28T	36T	36T	36T	36T	36T	36T	36T	36T
Max. Tool Diameter	mm/inch	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6	65 / 2.6
Max. Tool Diameter (without neighbor tool)	mm/inch	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1	130 / 5.1
Max. Tool Length	mm/inch	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	250 / 9.8	350 / 13.8	350 / 13.8	350 / 13.8
Max. Tool Weight	kgs/lbs	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4	7 / 15.4
Tool to Tool Time(60hz)	sec.	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
GENERAL											
Tank Capacity	liter/gal	250 / 66	250 / 66	350 / 92.5	350 / 92.5	400 / 105.7	350 / 92.5	400 / 105.7	640 / 169	700 / 185	900 / 237.8
Chip Disposal	-	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor					
Air Pressure Requirement	Mpa/psi	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5
Power Requirement	KVA	20	20	35	35	35	35	35	35	35	35
Floor Space	mm/inch	2845 x 2200 / 112 x 87	3145 x 2200 / 124 x 87	3400 x 2240 / 134 x 88	3800 x 2240 / 150 x 88	4200 x 2240 / 169 x 88	3900 x 2495 / 154 x 98	4300 x 2495 / 169 x 98	5100 x 3540 / 201 x 139	5750 x 3540 / 226 x 139	7050 x 3950 / 278 x 156
Weight	kgs/lbs	4250 / 9370	6280 / 13845	6280 / 13845	7180 / 15829	7980 / 17953	8390 / 18497	8690 / 19158	13000 / 28660	13700 / 30140	19500 / 42990

*Please contact with your local distributor for the further information, those specs. and value based on AKIRA Mi845 Controller.

Specification

HV-A Series

Ever Faster Cut Than Your Expectation



		HV4.5A	HV5.5A	HV6A	HV8A	HV10A
CONTROL SYSTEM		AKIRA Mi845 (Fanuc G code compatible)		AKIRA Mi845 (Fanuc G code compatible)		
TRAVEL						
X Axis Travel	mm/inch	1150 / 45.3	1350 / 53	1630 / 64.2	2060 / 81.1	2600 / 102.3
Y Axis Travel	mm/inch	640 / 25	640 / 25	850 / 33.5	850 / 33.5	1030 / 40.6
Z Axis Travel	mm/inch	660 / 26	660 / 26	815 / 32	815 / 32	815 / 32
Spindle nose to table surface	mm/inch	100~760 / 4~30	100~760 / 4~30	120~935 / 5~37	120~935 / 5~37	120~935 / 5~37
Spindle center to column cover	mm/inch	640 / 25	640 / 25	865 / 34	865 / 34	1050 / 41.3
TABLE						
Table size (L x W)	mm/inch	1300 x 600 / 51.1 x 23.6	1500 x 600 / 59 x 23.6	1750 x 800 / 69 x 31.5	2150 x 800 / 84.7 x 31.5	2750 x 950 / 108.2 x 37.4
T slot	mm/inch	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.94 x 5 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 7 slots	18 x 125 x 7 slots / 0.7 x 4.9 x 7 slots
Max. Loading	kgs/lbs	1560 / 3439	1800 / 3968	2760 / 6085	3240 / 7142	3600 / 7936
Standard Loading	kgs/lbs	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	3000 / 6614
SPINDLE						
Max. Motor Power (Peak)	HP+	42	42	42	42	42
Max. Motor Power (30min)	HP	35	35	35	35	35
Max. Speed	rpm	8,000 / 6,000 (OPT)	8,000 / 6,000 (OPT)	8,000 / 6,000 (OPT)	8,000 / 6,000 (OPT)	8,000 / 6,000 (OPT)
Spindle Taper	ISO 50	BT50 / CAT50	BT50 / CAT50	BT50 / CAT50	BT50 / CAT50	BT50 / CAT50
Method of Spindle Chilling	-	Oil chilling	Oil chilling	Oil chilling	Oil chilling	Oil chilling
FEED						
Rapid Feed X / Y / Z	M/min ipm	36 / 36 / 30 1417 / 1417 1181	36 / 36 / 30 1417 / 1417 1181	36 / 36 / 30 1417 / 1417 1181	36 / 36 / 30 1417 / 1417 1181	30 / 30 / 25 1181 / 1181 / 984
Cutting Feed X / Y / Z	M/min ipm	8 / 8 / 8 315 / 315 / 315	8 / 8 / 8 315 / 315 / 315	8 / 8 / 8 315 / 315 / 315	8 / 8 / 8 315 / 315 / 315	8 / 8 / 8 315 / 315 / 315
ACCURACY						
Positioning	mm/inch	0.01 / 0.00039	0.01 / 0.00039	0.015 / 0.00059	0.015 / 0.00059	0.015 / 0.00059
Repeatability	mm/inch	± 0.003 / ± 0.00012	± 0.003 / ± 0.00012	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020	± 0.005 / ± 0.00020
ATC						
Arm ATC	-	28T	28T	28T	28T	28T
Max. Tool Diameter	mm/inch	100 / 3.9	100 / 3.9	100 / 3.9	100 / 3.9	100 / 3.9
Max. Tool Diameter (without neighbor tool)	mm/inch	200 / 7.9	200 / 7.9	200 / 7.9	200 / 7.9	200 / 7.9
Max. Tool Length	mm/inch	350 / 13.8	350 / 13.8	350 / 13.8	350 / 13.8	350 / 13.8
Max. Tool Weight	kgs/lbs	15 / 33	15 / 33	15 / 33	15 / 33	15 / 33
Tool to Tool Time (60hz)	sec.	3.5	3.5	3.5	3.5	3.5
GENERAL						
Tank Capacity	liter/gal	350 / 92.5	400 / 105.7	640 / 169	700 / 185	900 / 237.8
Chip Disposal	-	Drawer	Drawer	Drawer	Drawer	Drawer
Air Pressure Requirement	Mpa/psi	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5	0.5 / 72.5
Power Requirement	KVA	35	35	35	35	35
Floor Space	mm/inch	3400 x 2495 / 134 x 98	3800 x 2495 / 150 x 98	4300 x 3525 / 169 x 139	4950 x 3525 / 195 x 139	6200 x 3960 / 244 x 156
Weight	kgs/lbs	8380 / 18474	8380 / 18474	12900 / 28438	13600 / 29981	19800 / 43649

*Please contact with your local distributor for the further information, those specs. and value based on AKIRA Mi845 Controller.