AKIRA-SEIKI®
PRECISION CNC MACHINE TOOLS

We Insist On Your Success.

Vertical Machining Center

Headquater

1st Factory

AKIRA-SEIKI®
PRECISION CNC MACHINE TOOLS

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AKIRA-SEIKI®

Always keeps moving to advance your future success.

With more than 25 years solid profession in machine tool technology, Akira Seiki expands marketing development from USA to the international.

In the past, we built reliable machineries to process customers' success in USA where is keen competition. Now, we broaden our mission to progress your competition wherever you are.

AKIRA SEIKI Chairman

Alan Kludjian

VISION

AKIRA-SEIKI *Headquarter in USA*

AKIRA-SEIKI *1st Factory*

Well Practice In Quality

Akira Seiki well management in production and quality is the fore and ever guarantee to our customer. Thorough practice of Quality Process Activity, every Akira Seiki execution is regulated and presented with documentary Standard Operation Procedure. Akira Seiki always carries on the professional Research & Development of next successful machine tool product to keep our customer advancement in the future.

Plenty Storage in Material Resourcee Department

Research and Development

Quality Control

Assembly

Hand-skill Engineering Experience

Spindle Test Run

Brochure Guide

AKIRA-SEIKI®

Vertical Machining Center

The Faster Way to Guide Your Production Effeciency !

Customer's Recommendation

quoted from

CNC WEST ARTICLE

June-July 2004 • Volume XXII No. 5
Story by C. H. Bush, editor; photography by John Semonish, staff photographer

Customers to the Rescue

Three Good Customers Refuse to Let a Job Shop Shrink in Size!

Three Silray Akira Seiki mills (a V4 Performa, an SV1000 and an SV1300) are grouped into a work cell. Operators are (foreground, right) CNC machinist Billy Roncallo, CNC machinist Mario Rosa (left front) and CNC machinist programmer Quoc Ta (background).

*Coming out of "tough times," **Silray needed high performance equipment at affordable prices. "The Akira Seikis did that for us,"** says Silray partner Bill Raybould. "The first machine worked so well for us that we bought three more. **These machines are easy on your budget, but they deliver a lot of performance for the money**." Components in foreground are for Five O mini off-road bikes (www.fiveoracing.com).*

New Equipment

The partners added to their equipment line-up by purchasing Akira Seiki SV1000, three more Akira Seiki machines, an SL 35 CNC lathe, a V4 Performa, and an SV 1300 machining center.

*"As you can imagine, things were still pretty tight for us," Raybould says, "so **we needed the best performance we could get for the money we had available**. We were invited to come out and run a test on the first Akira, the SV 1000, before we bought it, and we liked what we saw. We ran that first machine eight to sixteen hours a day and it delivered everything we needed, precision and reliability. Based on the first machine's performance, we bought three more. **Our next machine will also be an Akira Seiki, but it will be a new one**. If we keep growing, that won't be long."*

*In spite of being able to re-equip his shop with far less money than he might have spent otherwise" , **Raybould feels his Akira Seiki machines can hold their own in terms of precision and quality finishes.***

*He explains. "The tolerances on those parts are critical and we hold that with ease on our Akira Seikis. **The controllers on the mills have look ahead, which allows them to speed up and slow down as required to keep a good finish. They're well built and very rigid, so we get good results. We're very impressed."***

Now AKIRA SEIKI regenerates all Vertical Spindle Machines to prepare you future success now!

AKIRA-SEIKI® Product Guide

Vertical Machining Center-*L*iner *M*otion *G*uide

X axis travel (mm / inch)			410 / 16.1	550 / 21.6	762 / 30	550 / 21.7	760 / 30	815 / 32.1	1050 / 41.3	1300 / 51.2	1150 / 45.3	1350 / 53.1	1630 / 64.2	2060 / 81.1	2600 /102
Y axis travel (mm / inch)			410 / 16.1			435 / 17.1		540 / 21.3			640 / 25.2		850 / 33.5		1030 / 41
Z axis travel (mm / inch)			460 / 18.1			520 / 20.4		560 / 21.9			660 / 26		815 / 32.1		815/ 32
Performa Junior	BT-40	9000~11000rpm 12~15HP main motor	JR	SR2	SR3										
Performa Classic	BT-40	9000rpm 20~30HP main motor				V2	V2.5	V3	V4	V5	V4.5	V5.5	V6	V8	V10
Xtra Performance	BT-40	12000rpm 22~36HP main motor				V2 XP	V2.5 XP	V3 XP	V4 XP	V5 XP	V4.5 XP	V5.5 XP	V6 XP	V8 XP	V10XP
Akira Super Vertical	BT-40	15000rpm 25~42HP main motor				SV550	SV760	SV815	SV1050	SV1300	SV1150	SV1350	SV1630	SV2060	SV2600
Akira Superior Speed Heavy Duty	BT-50	8000rpm 42HP main motor									HV4.5A	HV5.5A	HV6A	HV8A	HV10A

Performa Junior
JR SR series
Cost Effect BT-40 Vertical
12 models

Performa Classic
V series
Ultra High Performance BT-40 Vertical
40 models

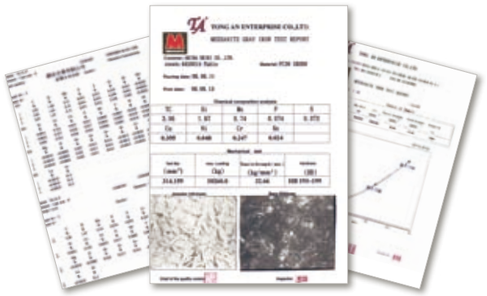
Akira Super Vertical
SV series
Ultra High Speed BT-40 Vertical
10 models

Akira Superior Speed Heavy Duty
HV-A series
Ultra High Speed BT-50 Vertical
4 models

Rigid Physical Foundation

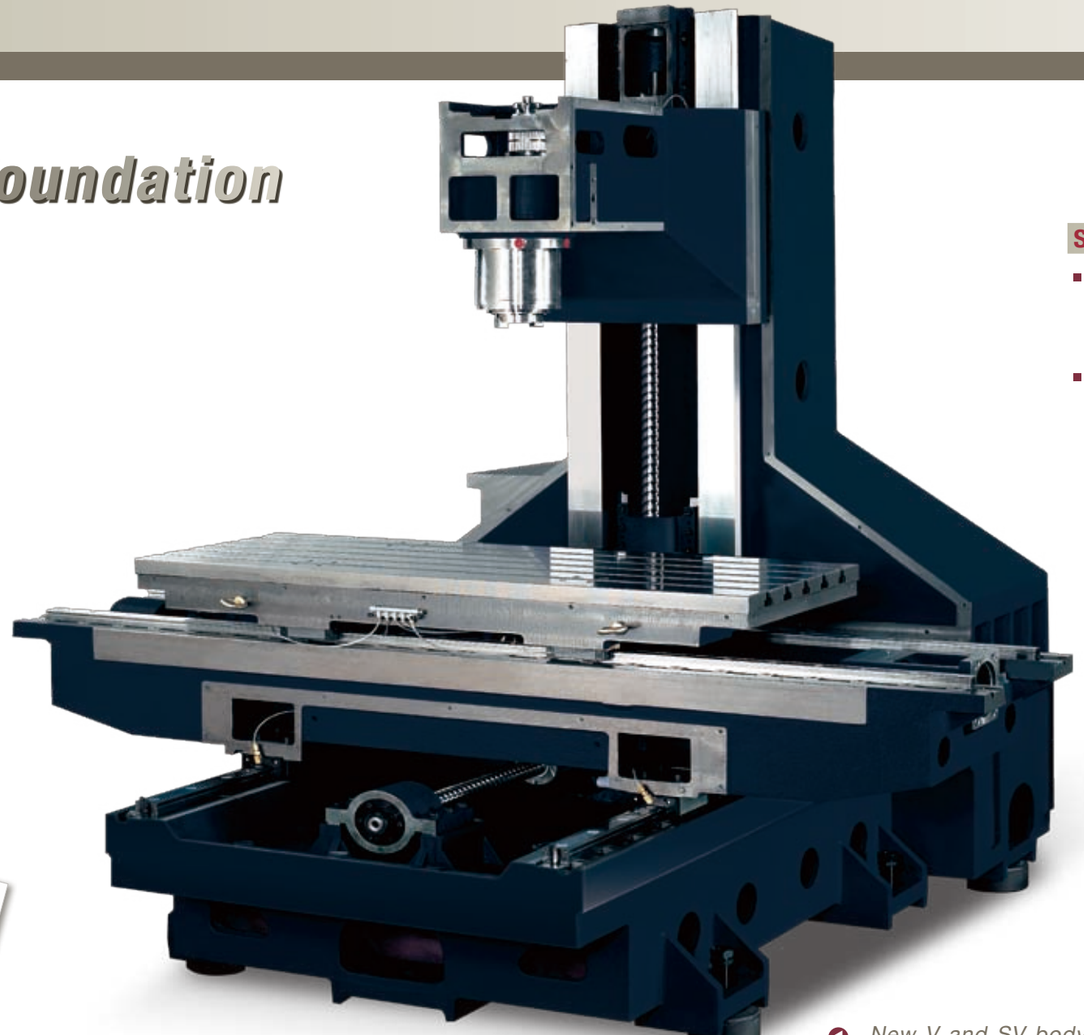
MEEHANITE

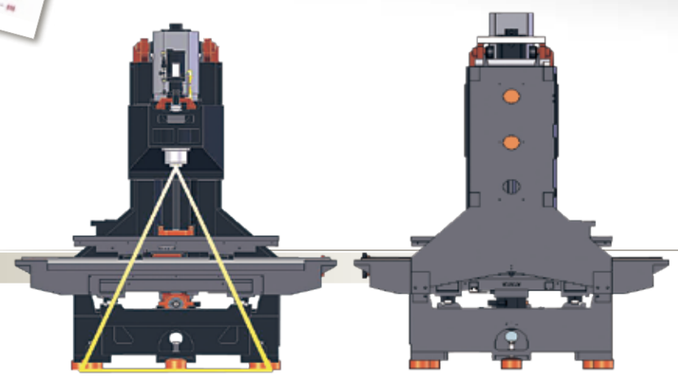
- **MEEHANITE** high quality casting iron assures permanent rigidity and accuracy.
- Each Akira Seiki casting frame is verified when founded by the autherized Meehanite foundries.
- The Certificate of Mehanite casting follows each Akira Seiki machine.



Material Guarantee

*Casting **physical report** attached with every **AKIRA SEIKI** Machine*





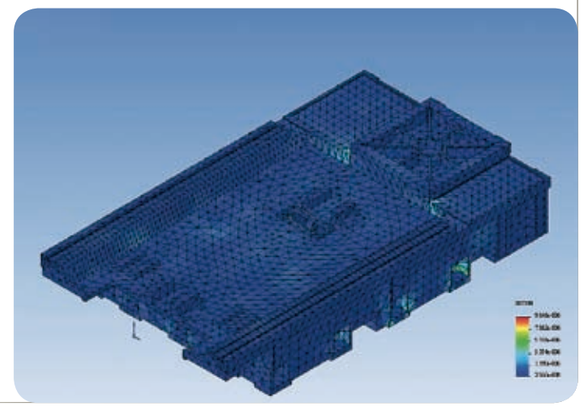
Steady Rigidity

- **Golden Triangular frame** in optimum span of bed base and guide ways supports the superior acceleration and deceleration movement.
- **Large box way column** and head cartridge for high speed cutting and smooth finishing.

(for V3-V8/SV815-2060/HV4.5A-HV8A / BV)

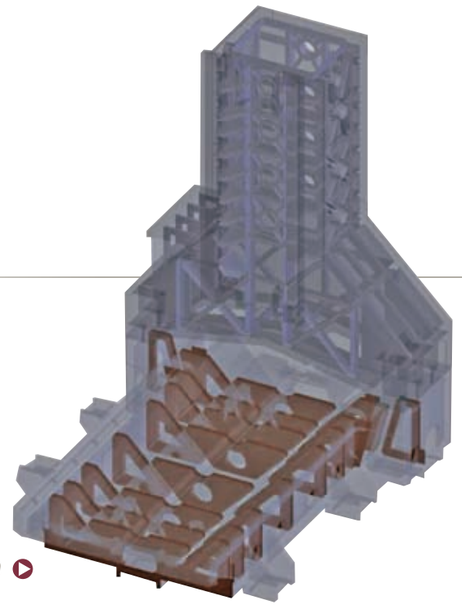
Scientific Technology Support

- Physical rigidity are ensured for all Akira Seiki strong VMC in the primary design progress by **advanced digital assay tool.** All structural frames apply COSMOS system for analysis to **optimize rigid mechanism foundation.**
- **Digital FEA** (Finite Element Analysis) scientifically demonstrates rigid structure and approves excellent dynamic accuracy and vibration absorption while rapid cutting.



The base of V6/V8/SV1630/SV2060

*New V and SV body with **more 700~1000kgs** increased than before!*



Reinforced Frame Construction

- Akira Seiki VMC 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 **anti-damping vibration.**

Reinforced construction frame of V4.5-5.5 / SV 1150-1350

** All specification subject to change without notice.*

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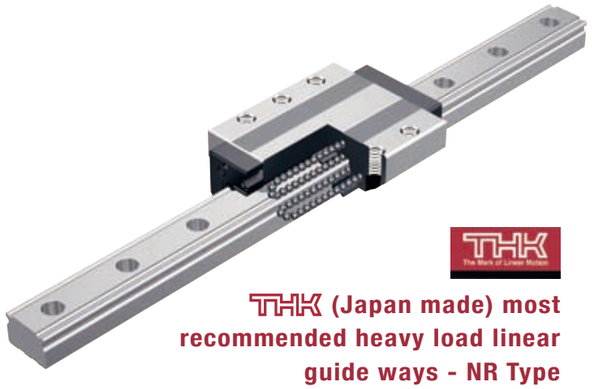
High Axial Loading Drive and Rapid Feed

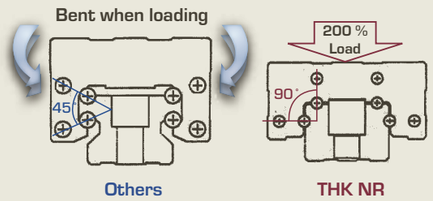
- **Least friction coefficient** and **preloading for clearance-free** between moving surface, precise ball linear guide ways are most compatible for fast movement and **high positioning & repeatability accuracy.**
- To carry high cutting rapid and loading capability, the major feeding axes are in **Japan THK most recommended NR type linear guide ways** (THK patented).

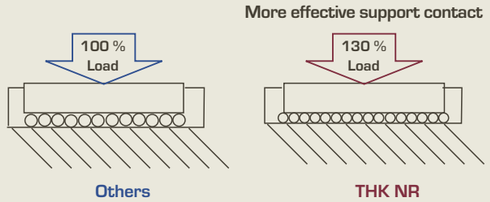


THK (Japan made) most recommended heavy load linear guide ways - NR Type

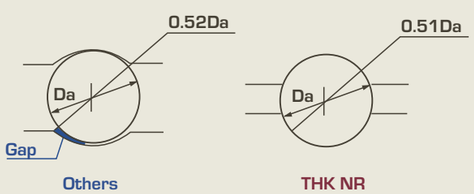
Ultra High Motion Rigidity

- NR type linear guide thicker flat-carrier block, low gravity center, 90 contact ball guides support **200% cutting load than others.**
- Increased loading capacity on major load direction.
- Minimize ball diameter and increase ball numbers, raise up **the effective contact rigidity to 30% than others.**

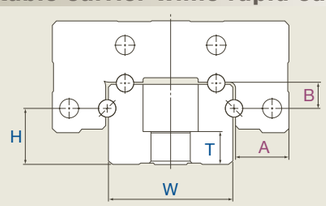




- Da 51% curvature achieve perfect ball rotary rigidity, less vibration when fast feed.



- **Low gravity-center structure as most stable carrier while rapid cutting**



NP type contact structure

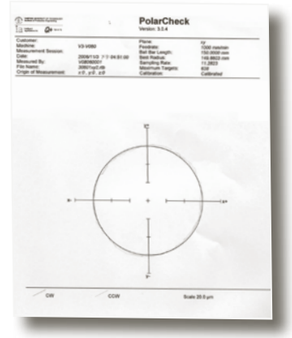
The height of "H" and "T" is short, it results in qotimum small ratio between "H" and "W". Accordingly, the deformation of the NR rail under **a lateral load is minimal,** and the **rigidity in the lateral direc-tions is increased.**

The height of "B" is short and the thickness "A" is large, the lateral extension of the LM block load of a reverse-radial or lateral is minimized. Results in **increased rigidity.**

** Check availability with local distributor or Akira Seiki.*

Enforced Double-nutted Ballscrew

- **Double-anchored** ballscrew with **ever extra broadened bearing nut** than any others, enhance high speed cutting rigidity and accuracy while high cutting rapid feed.
- **100% laser track and ball bar collaboration test** ensure the linear and ballscrew geometry accuracy.



Super Grade Precision Ballscrew

Tubeless ball-turn, free from noise

5~7dB lower than traditional series. The patented design of the return unit will reduce noises from impact of the ballnut's balls and its intensity.

Enforced transmission rigidity

Total 4-5 ball-turn channels increase the transimission loading capacity (standard for V / SV / HV-A / BV). **33% higer rigidity than traditional 3 ball-turn channel ballscrews.**

Dm-N value up to 200,000

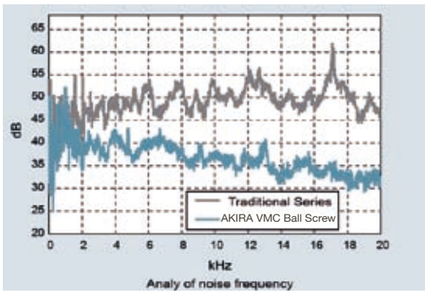
Enforced reutrn structure **achieving Dm-N value up to 200,000**, which is **100% higher** than traditional Dm-N value 100,000.

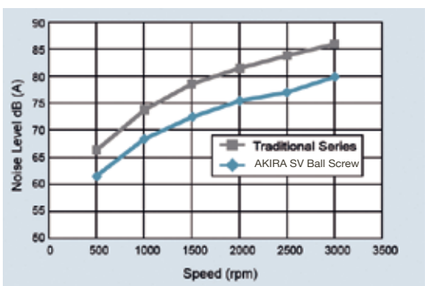
High acceleration and deceleration velocity

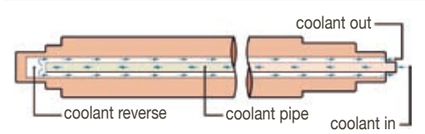
The pathway of the specialized return unit and ballnut's strengthened design diminish the impact experienced by the ball, it can sustain **peak performance in more rigorous operating environments,** such as **high acceleration and deceieration.**

Effective ballscrew thermal control

Ballcrew Hollow for Cooling (available option) allows the circular chilling pumped through. The very recommended feature for ballscrew **reliable thermal control** for frequent rapid operation in duration operation to **assure high machining precision.**







** Check availability with local distributor or Akira Seiki.*

Cost-Effect Spindle Features

Cartidge Drive

By the durable **High-torque Timing Belt** to output the spindle torque sufficiently and rpm speed for **wide range machining application**, Designed for high speed rotation in **excellent low inertia** and **well-balance** that acts **efficient acceleration** and ever-lasting cutting rigidity. It is admirable **value-effective solution**.

In-line Drive

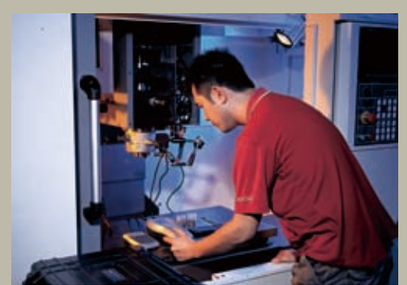
The advance Akira Seiki Direct Drive Spindle is available configuration. The Direct Drive Spindle is **straightly jointed to ultra high horse power motor**. This advanced spindle drive provides **greater super-smooth cutting surface** for delicate jobs,the precise aligned motor output effective torque.

Productive Type Spindle

Akira Seiki seizes the major key technology in **Productive Type Spindle** development. To ensure the spindle **best balance** performance for **last-ever longevity**, Akira Seiki apply **high end inspection equipment** for fully supervising each good quality spindle, including **3D coordinate machine, balance test, on-line dynamic balance check roundness test machine by Japan made**. The **artificial intelligent thermal control** from inner spindle regulates the proper load rigidity in different speed range. For long life of spindle, all Akira Seiki Productive Type Spindles are all design in **well low-inertial** to enhance high speed machining.

Spindle Roundness Test

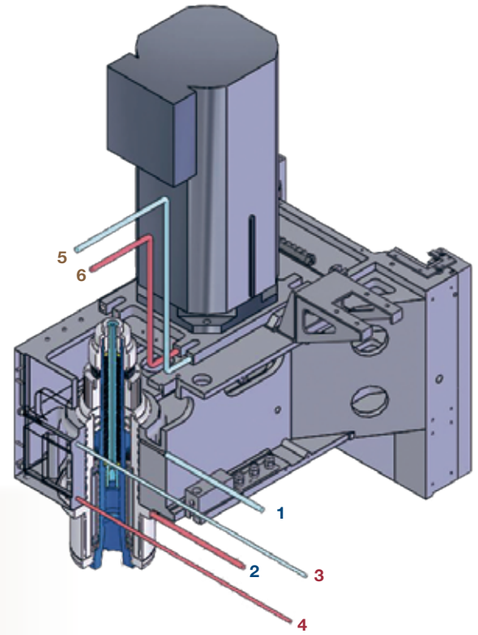
Clean room for Spindle Assembly



Dynamic Balance during Production

Stable Thermal Control

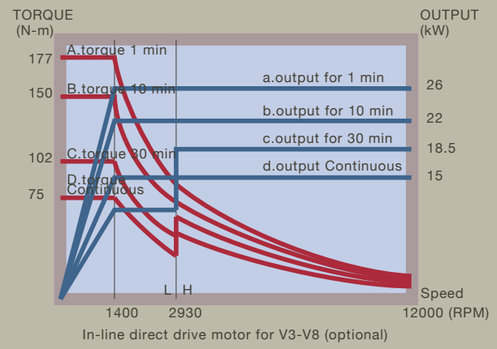
- The perfect chilling system minimizes the constant temperature of spindle and **coolant supply to wide head cartridge** area to prevent deformation during cutting period. Any potential heat from motor is fully isolated by the special cool modification.
- Either constant filtrated air or oil supply **ambient chilling to all over the spindle** and head sections.
- Labyrinth air blow **protects spindle from tiny cutting chips and coolant**.



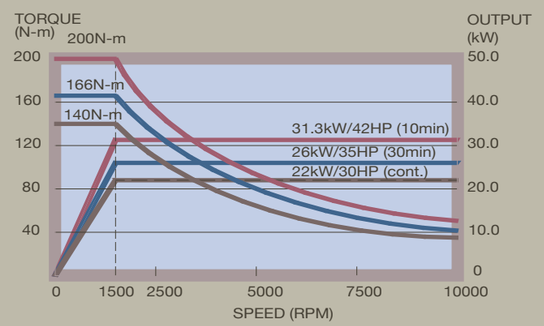
- Tube 1 & 2 Circulating chilling in/out tunnels for spindle
- Tube 3 & 4 Circulating coolant in/out tunnels for head cartridge
- Tube 5 & 6 Circulating chilling in/out tunnels to isolate motor heat

Superior Power Output

Akira Seiki employs **world class servo spindle drive and motor**. Akira Seiki seizes the essential technology to increase low speed torque and **constant high horsepower output** covering wide spindle speed. It reflects irreplaceble **benefit of delicate surface cut** like milling and pocketing that require mostly motor horsepower.



In-line direct drive motor for V3-V8 (optional)



(motor output for SV815-2050/HV4.5A-HV8A)

AKIRA Mi645

Premium Performance Controller

To optimize combination with JR/SR rigid machining center, AKIRA M*i* 645 coordinates the **CNC digital control** and **world leader drive system**. High resolution servo stabilizes precise axis positioning for **high complex and accuracy jobs**. Absolute industrial control components ensure **reliable longevity** and instant technical support in worldwide service centers.

AKIRA Mi645 Control

High Achievement for Machining Efficiency

AKIRA M*i*645 powerful **64bit CPU** incorporate the fastest-ever computation processions and program scanning.

Full **look ahead up to 500 blocks** (Computer Link B) and **G05P10000 High Speed and High Accuracy control** allow contouring rapid and smoother motion.

AKIRA M*i*645 operation interface stands by the customer's visual convenience.

- **5120M (2MB)** initial program memory is available as the largest industrial NC program stored capability(option).
- Fully **graphic function** including simulate run, tool path check and graphic scaling the same coordinate.
- **One-Button features** ease the often used functions instead of multi-steps procedure. Only by one- button command to complete **tool offset, selecting tool, ATC home return, ATC restore and so on**.
- 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 & back biewing.
- **Program reserver** available to adapt flash memory card & Ethernet connection.
- **High compatibility** to Fanuc control programming.
- AKIRA M*i*745 is available for option

Convenient Program Data Transferring

Optional Program Reservoir allows high speed machining with large data capacity via IC memory card or Ethernet. (IC card should be prepared by users). USB as available option.

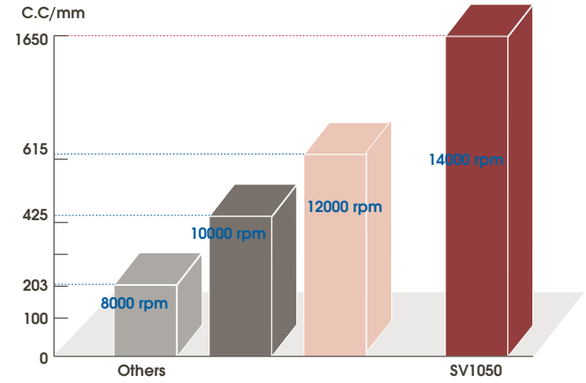
** All specification subject to change without notice.*

The cutting trend - Powerful Chip Removed

Superior High Main Motor Output + Fine-balance High Spindle Speed + Strong Machine Body

Cutting Advantage

Faster, Accurate , Energy-Saved

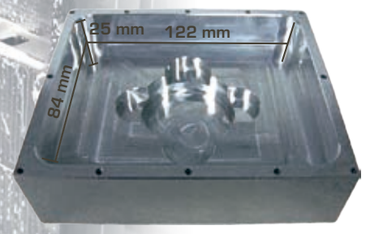


chip removable capability
168%-700% than other general VMC

The impact cutting result

Cutting movie available in Akira Seiki website

Powerful Pocketing



Machine Model : V4XP
Material : Aluminium
Cutting feed : 8350 mm/min
Spindle speed : 10500 rpm
Surface Ra : 0.6 μm

Fast Milling

Machine Model : SV1050
Material : S45C Mild Steel
Cutting Feed : F 12000 mm/min
Cutting Speed : S 4000 rpm

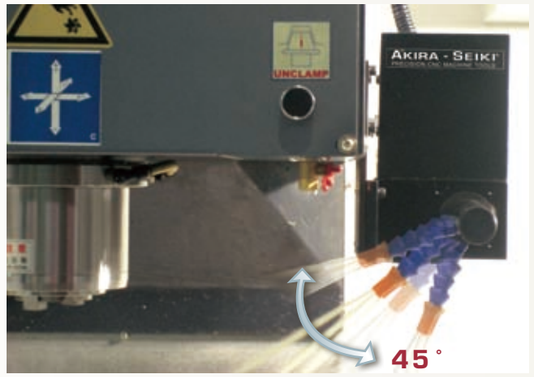
Above cutting data related to Akira Seiki's own internal tooling application. Please check further information with your local distributor.

Operater Convenience Devices

Variable Coolant Solution

Coolant Through Spindle

- Combined with advance tooling technology for **longer tooling longevity**, the optional Coolant through Spindle(CTS) help to increase the **higher cutting speed**, **chips removable for deep-hole drill** and **fine finishing of pocketing mill**.35-50 bar filtration pressure applied for efficient chip removable.

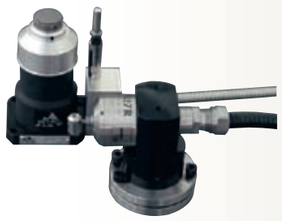


Programmable Coolant Nozzle

- The optional programmable coolant nozzle with easy setting by M codes supplies the coolant aiming directly on the working piece. A very convenient device to **eliminate operator's manual adjustable inconvenience**, coolant injection range from 0~45 degree.

Tool and Part Measurement

- Simplified tool measurement either for tool length or for tool outer diameter can be activated with initial M codes for **breakage detective** and also **auto compensation**. Such high resolution measurement **ensures qualified tooling condition** and preserves the **high Capability of Precision (CP value)** during the machining.



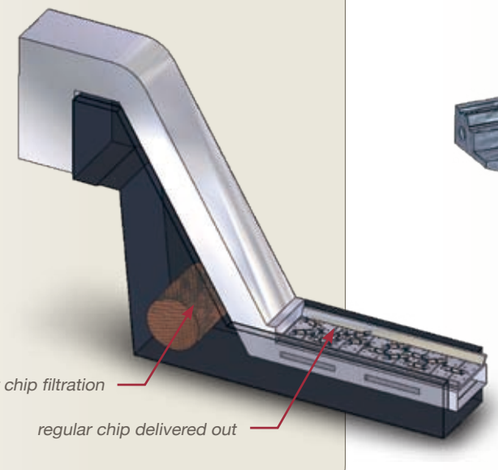
- The **advance part probing system** acts parts inspection and primary-piece measurement, the data quickly **advances the necessary adjustment and coordinate compensation** for **high quality processing**.

Chip Removing

- Blade spiral chip conveyor built-in enclosure guarding as **an economic option** to help to **compress the cutting chips** and **conveniently remove out the chips** to side of the machines.

- Hinge type chip conveyor provides the **most efficient chip removal** jobs and **best chip-free coolant effect for massive production**. The chip **disposal height 1200mm** allows the space for **1 gallon (4.6L) trolley** for **saving clear-up time**.

- **Double-level filter** is available option to isolate medium and tiny chips, to maintain good coolant condition.



* *Check availability with local distributor or Akira Seiki.*

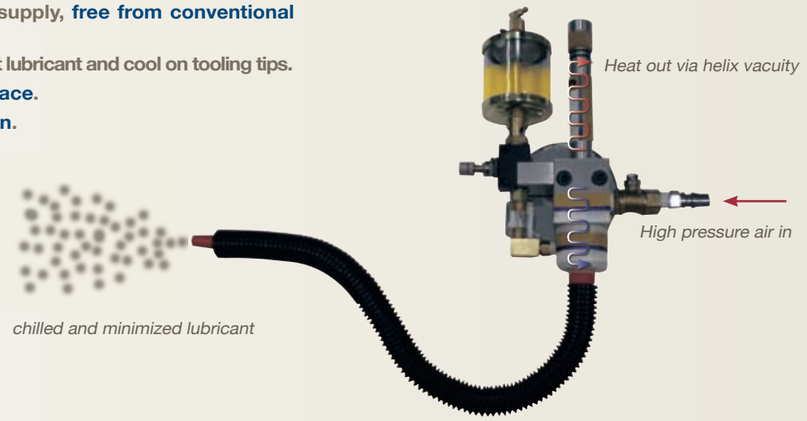
Tidy Operative Environment

Advance Environmental Coolant

MQL cutting solution

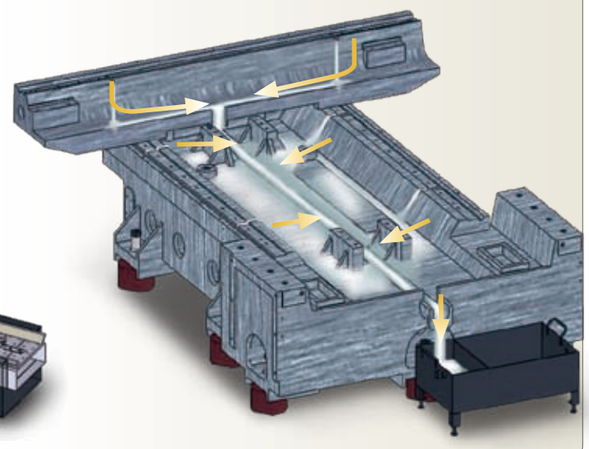
The advance semi-dry cutting way by Minimum Quantity Lubricant brings numerous benefit :

- **Cost saved** in least oil supply, **free from conventional coolant waste**.
- **Extend tool life** by instant lubricant and cool on tooling tips.
- **High quality cutting surface**.
- **Environmental protection**.



Waste Lubricant / Coolant Separation

- All Akira Seiki VMC 3 axis casting components are well designed to **guide all the waste lubrication gathered** into the machine base.
- The outer separator removes the lubricant away from the coolant system to **maintain coolant quality.**



* *Check availability with local distributor or Akira Seiki.*

High Accuracy NC Rotary Table

Table diameter : Ø130mm
Clamp Force : Pneumatic
Vertical / Horizontal Operated

Table diameter : Ø170 ~ 320mm
Clamp Force : Pneumatic / Hydraulic
Vertical / Horizontal Operated

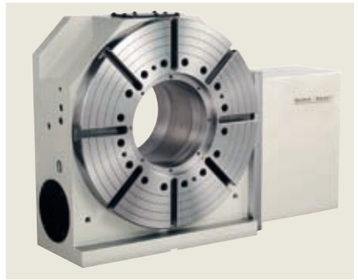


Table diameter : Ø400 ~ 800mm
Clamp Force : Hydraulic
Vertical / Horizontal Operated

More application

Tailstock in simultaneously activation with NC table. The customerized fixture bracket is available.

Multi - faces processing

NC Table Availability

●Available on standard machine configuration
▲Available with optional extendable column
△Check with Akira Seiki for interference infomation

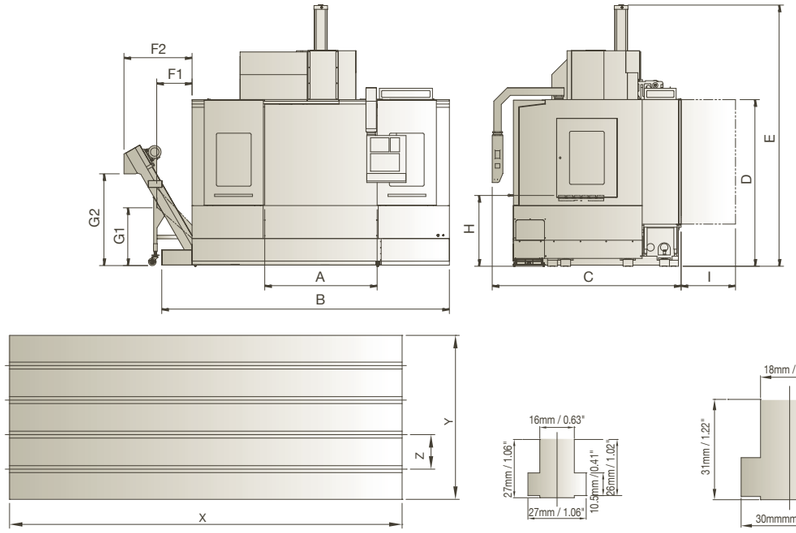
4th Axis Rotary	JR / SR2 / SR3	V2 / V2.5 SV550 / SV760	V3 / V4 / V5 / V4.5 / V5.5 SV815 - SV1350 HV4.5A / HV5.5A	V6 / V8 / V10 SV1630 / SV2060 / SV2600 HV6A / HV8A / HV10A
Ø130mm	●	●		
Ø170mm	●	●		
Ø220mm	▲	●	●	
Ø280mm		▲	●	
Ø320mm			● ▲	●
Ø400mm			● ▲	●
Ø630mm				●
Ø800mm				●

4/5th Axis Tilting Rotary Table	JR / SR2 / SR3	V2 / V2.5 SV550 / SV760	V3 / V4 / V5 / V4.5 / V5.5 SV815 - SV1350 HV4.5A / HV5.5A	V6 / V8 / V10 SV1630 / SV2060 / SV2600 HV6A / HV8A / HV10A
Ø125mm		●		
Ø170mm	▲	●		
Ø200mm		▲	●	
Ø255mm			●	
Ø320mm			● ▲	●
Ø400mm				● △
Ø500mm				● △

** All specification subject to change without notice.*

** Check with your local distributor for allowable working space.*

Lay out & Measurement



Unit (mm / inch)

Model	A	B	C	D (ele. Door open)	E (max height)	F1 (Chip Screw)	F2 (Chip Conveyor)	G1 (Chip Screw)	G2 (Chip Conveyor)	H (floor-table)	I	T (T-slot)	X	Y	Z
JR / JR XP	700 / 27.6	1900 / 75	1935 / 76.2	1770 / 70	2500 / 98.4	496 / 19.5	- -	748 / 29.4	- -	820 / 32	550 / 22	16 / 0.6	560 / 22	380 / 15	80 / 3
SR2 / SR2 XP	700 / 27.6	1900 / 75	1935 / 76.2	1770 / 70	2500 / 98.4	496 / 19.5	- -	748 / 29.4	- -	820 / 32	550 / 22	16 / 0.6	700 / 27.6	380 / 15	80 / 3
SR3 / SR3 XP	700 / 27.6	2100 / 83	1935 / 76.2	1770 / 70	2500 / 98.4	496 / 19.5	- -	748 / 29.4	- -	830 / 33	550 / 22	16 / 0.6	910 / 35.8	380 / 15	80 / 3
V2 / V2 XP	680 / 26.8	1900 / 75	2200 / 86.6	1945 / 76.6	2630 / 103.5	496 / 19.5	- -	748 / 29.4	- -	790 / 31.1	550 / 22	18 / 0.7	700 / 27.6	400 / 15.7	80 / 3
V2.5 /V2.5 XP	810 / 31.9	2200 / 86.6	2200 / 86.6	1945 / 76.6	2630 / 103.5	496 / 19.5	- -	748 / 29.4	- -	790 / 31.1	550 / 22	18 / 0.7	910 / 35.8	400 / 15.7	80 / 3
V3 / V3 XP	980 / 38.6	2900 / 114.2	2280 / 90	2120 / 83	3130 / 123.2	366 / 14.4	- -	765 / 30.1	- -	905 / 35.6	730 / 29	18 / 0.7	950 / 37.4	480 / 18.9	80 / 3
V4 / V4 XP	1260 / 49.6	3300 / 130	2280 / 90	2120 / 83	3130 / 123.2	366 / 14.4	- -	765 / 30.1	- -	905 / 35.6	730 / 29	18 / 0.7	1200 / 47.2	480 / 18.9	80 / 3
V5 / V5 XP	1530 / 60.2	3800 / 149.6	2280 / 90	2120 / 83	3130 / 123.2	366 / 14.4	- -	765 / 30.1	- -	940 / 37	730 / 29	18 / 0.7	1460 / 57.1	480 / 18.9	80 / 3
V4.5 / V4.5 XP	1350 / 53.1	3400 / 133.9	2495 / 98	2200 / 87	3450 / 135.8	466 / 18.3	- -	772 / 30.4	- -	905 / 35.6	730 / 29	18 / 0.7	1300 / 51.2	600 / 23.6	100 / 4
V5.5 / V5.5 XP	1550 / 61	3800 / 149.6	2495 / 98	2200 / 87	3450 / 135.8	466 / 18.3	- -	772 / 30.4	- -	940 / 37	730 / 29	18 / 0.7	1500 / 59.1	600 / 23.6	100 / 4
V6 / V6 XP	1800 / 70.9	4300 / 169	3580 / 140.9	2130 / 84	3320 / 130.7	520 / 20.5	- -	745 / 29.3	- -	960 / 37.8	550 / 22	18 / 0.7	1750 / 68.9	800 / 31.5	125 / 5
V8 / V8 XP	2200 / 86.6	5300 / 209	3580 / 140.9	2130 / 84	3320 / 130.7	520 / 20.5	- -	745 / 29.3	- -	1000 / 39.3	550 / 22	18 / 0.7	2150 / 84.6	800 / 31.5	125 / 5
V10 / V10 XP	2830 / 111.4	6720 / 264.5	3959 / 155.8	2114.5 / 83.2	3320 / 130.7	- -	850 / 33.4	- -	1200 / 47.2	1098 / 43.2	541 / 21.3	18 / 0.7	2750 / 108.2	950 / 37.4	125 / 4.9
SV550	680 / 26.8	1900 / 75	2200 / 86.6	1945 / 76.6	2630 / 103.5	- -	945 / 37.2	- -	1160 / 45.7	790 / 31.1	550 / 22	18 / 0.7	700 / 27.6	400 / 15.7	80 / 3
SV760	810 / 31.9	2200 / 86.6	2200 / 86.6	1945 / 76.6	2630 / 103.5	- -	945 / 37.2	- -	1160 / 45.7	790 / 31.1	550 / 22	18 / 0.7	910 / 35.8	400 / 15.7	80 / 3
SV815	980 / 38.6	2900 / 114.2	2280 / 90	2120 / 83	3130 / 123.2	- -	900 / 35.4	- -	1220 / 48	905 / 35.6	730 / 29	18 / 0.7	950 / 37.4	480 / 18.9	80 / 3
SV1050	1260 / 49.6	3300 / 130	2280 / 90	2120 / 83	3130 / 123.2	- -	900 / 35.4	- -	1220 / 48	905 / 35.6	730 / 29	18 / 0.7	1200 / 47.2	480 / 18.9	80 / 3
SV1300	1530 / 60.2	3800 / 149.6	2280 / 90	2120 / 83	3130 / 123.2	- -	900 / 35.4	- -	1220 / 48	940 / 37	730 / 29	18 / 0.7	1460 / 57.1	480 / 18.9	80 / 3
SV1150 / HV4.5A	1350 / 53.1	3400 / 133.9	2495 / 98	2200 / 87	3450 / 135.8 / 3520 / 138.6	- -	900 / 35.4	- -	1220 / 48	905 / 35.6	730 / 29	18 / 0.7	1300 / 51.2	600 / 23.6	100 / 4
SV1350 / HV5.5A	1550 / 61	3800 / 149.6	2495 / 98	2200 / 87	3450 / 135.8 / 3520 / 138.6	- -	900 / 35.4	- -	1220 / 48	940 / 37	730 / 29	18 / 0.7	1500 / 59.1	600 / 23.6	100 / 4
SV1630/HV6A	1800 / 70.9	4300 / 169	3580 / 140.9	2130 / 84	3320 / 130.7	- -	850 / 33.5	- -	1200 / 47.2	960 / 37.8	550 / 22	18 / 0.7	1750 / 68.9	800 / 31.5	125 / 5
SV2060/HV8A	2200 / 86.6	5300 / 209	3580 / 140.9	2130 / 84	3320 / 130.7	- -	850 / 33.5	- -	1200 / 47.2	1000 / 39.3	550 / 22	18 / 0.7	2150 / 84.6	800 / 31.5	125 / 5
SV2600/ HV10A	2830 / 111.4	6720 / 264.5	3959 / 155.8	2114.5 / 83.2	3320 / 130.7	- -	850 / 33.4	- -	1200 / 47.2	1098 / 43.2	541 / 21.3	18 / 0.7	2750 / 108.2	950 / 37.4	125 / 4.9

** All specification subject to change without notice.*

		Performa JR	Performa SR2	Performa SR3	Performa JR XP	Performa SR2 XP	Performa SR3 XP
CONTROL SYSTEM		**Akira Mi645 (Fanuc code compatible)**					
TRAVEL							
X Axis Travel	mm / inch	410 / 16.1	550 / 21.7	762 / 30	410 / 16.1	550 / 21.7	762 / 30
Y Axis Travel	mm / inch	410 / 16.1	410 / 16.1	410 / 16.1	410 / 16.1	410 / 16.1	410 / 16.1
Z Axis Travel	mm / inch	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1	460 / 18.1
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
Spindle Center to Column cover	mm / inch	435 / 17	435 / 17	435 / 17	435 / 17	435 / 17	435 / 17
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
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
Max. Loading	kgs / lbs	600 / 1322	800 / 1764	1100 / 2425	600 / 1322	800 / 1764	1100 / 2425
Standard Loading	kgs / lbs	360 / 793.7	480 / 1058	660 / 1455	360 / 793.7	480 / 1058	660 / 1455
SPINDLE							
Max. Motor Power (Peak)	HP	12	15	15	12	15	15
Max. Speed	rpm	9000	9000	9000	11000	11000	11000
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 1161 / 1181 / 945	30 / 30 / 24 1161 / 1181 / 945	30 / 30 / 24 1161 / 1181 / 945	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181	36 / 36 / 30 1417 / 1417 / 1181
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
ACCURACY							
Positioning	mm / inch	0.01 / 0.00039	0.001 / 0.00039	0.000 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 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
ATC							
Tool Storage	"C" model - carrousel ATC "A" model - arm ATC	C-12T A-16T	C-12T A-16T	C-16T A-20T	C-12T A-16T	C-12T A-16T	C-16T A-20T
Max. Tool Diameter	mm / inch	100 / 3.9 75 / 3	100 / 3.9 75 / 3	100 / 3.9 75 / 3	100 / 3.9 75 / 3	100 / 3.9 75 / 3	100 / 3.9 75 / 3
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 / 5.9 150 / 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 / 9.8 250 / 9.8
Max. Tool Weight	kgs / lbs	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15
Tool to Tool Time(60hz) for "A" model	sec.	2.2	2.2	2.2	2.2	2.2	2.2
GENERAL							
Tank Capacity	liter / gal	150 / 40	150 / 40	150 / 40	150 / 40	150 / 40	150 / 40
Chip Disposal		Drawer	Drawer	Drawer	Chip Screw	Chip Screw	Chip Screw
Air Pressure Requirement	kgs / lbs (per cm^2)	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15
Power Requirement	KVA	16	20	25	16	20	25
Floor Space	mm / inch	1900x1935 / 75x76	1900x1935 / 75x76	2100x1935 / 83x76	2396x1935 / 94x76	2396x1935 / 94x76	2596x1935 / 102x76
Weight	kgs / lbs	2850 / 6283	3250 / 7165	3480 / 7672	3202 / 7059	3420 / 7539	3650 / 8046

Note : 1 year limited warranty
*All specification subject to change without notice.
*Rated HP is peak at short time.
*Accuracy quoted at 68°F on 8" steel reinforced concrete.
* Blue lines as standard for "XP" models.
* Red lines as standard for "A" model with arm type ATC.
†See Akira Seiki technical bulletin for additional details

** All specification subject to change without notice.*

AKIRA-SEIKI®
PRECISION CNC MACHINE TOOLS

Performa
Junior series
Jump Start into Success
JR•SR2•SR3 plus XP

Primary Selection for Economic Entry

Standard Features & Accessories:

- ✓ Spindle inner air chilling
- ✓ Pneumatic counter balance
- ✓ Head cartridge coolant through
- ✓ Spindle air blow
- ✓ Free backlash cam roller armless type ATC (only for SR2/SR3)
- ✓ Rigid tapping
- ✓ Tool life managment
- ✓ Spindle taper air blow
- ✓ High pressure coolant flush
- ✓ Enclosure splash guard
- ✓ Heat exchanger for electrical cabinet
- ✓ Remote control MPG
- ✓ Water oil separation design
- ✓ 3 level operation status lights
- ✓ Coolant tank and chip case
- ✓ Chip screw (standard for XP series)
- ✓ Automatic lubrication
- ✓ Leveling pads x 6 pcs
- ✓ Tools and toolbox kit

** All specification subject to change without notice.*

		Performa V2 / V2 XP	Performa V2.5 / V2.5 XP	Performa V3 / V3 XP	Performa V4 / V4 XP	Performa V5 / V5 XP	Performa V4.5 / V4.5 XP	Performa V5.5 / V5.5 XP	Performa V6 / V6 XP	Performa V8 / V8 XP	Performa V10 / V10 XP
CONTROL SYSTEM		Akira Mi645 (Fanuc code compatible)									
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	435 / 17	435 / 17	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	75-635 / 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	860 / 34	865 / 34	1050 / 41.3
TABLE											
Table size (L x W)	mm / inch	700x400 / 27.6x15.8	910x400 / 35.8x15.8	950 x 480 / 37.4 x 19	950 x 480 / 37.4 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	2750x950 / 108.2x37.4
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 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 100 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.15 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	800 / 1764	1000 / 2205	1200 / 2646	1300 / 2866	1400 / 3087	2000 / 4409	2300 / 5071	3000 / 6614	4000 / 8820	4000 / 8820
Standard Loading	kgs / lbs	600 / 1323	800 / 1764	900 / 1984	980 / 2160	1080 / 2381	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	2700 / 5952
SPINDLE											
Max. motor power (Peak)	HP	V= 20 XP =22	V= 20 XP =22	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36	V= 30 XP =36
Max. Speed	rpm	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000	9000 12000
Spindle Taper	ISO40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40
FEED											
Rapid Feed X/Y/Z	M / min ipm	40 / 40 / 30 1574 / 1574 / 1181 44 / 44 / 36 1732 / 1732 / 1417	40 / 40 / 30 1574 / 1574 / 1181 44 / 44 / 36 1732 / 1732 / 1417	40 / 40 / 25 1574 / 1574 / 984 44 / 44 / 25 1732 / 1732 / 984	40 / 40 / 25 1574 / 1574 / 984 44 / 44 / 25 1732 / 1732 / 984	40 / 40 / 25 1574 / 1574 / 984 44 / 44 / 25 1732 / 1732 / 984	30 / 30 / 25 1181 / 1181 / 984 33 / 33 / 25 1299 / 1299 / 984	30 / 30 / 25 1181 / 1181 / 984 33 / 33 / 25 1299 / 1299 / 984	30 / 30 / 25 1181 / 1181 / 984 33 / 33 / 25 1299 / 1299 / 984	30 / 30 / 25 1181 / 1181 / 984 33 / 33 / 25 1299 / 1299 / 984	30 / 30 / 24 1181 / 1181 / 945 33 / 33 / 24 1299 / 1299 / 945
Cutting Feed X/Y/Z	M / min ipm	18 / 18 / 18 709 / 709 / 709 24 / 24 / 24 945 / 945 / 945	18 / 18 / 18 709 / 709 / 709 24 / 24 / 24 945 / 945 / 945	10 / 10 / 10 394 / 394 / 394 12 / 12 / 10 472 / 472 / 394	10 / 10 / 10 394 / 394 / 394 12 / 12 / 10 472 / 472 / 394	10 / 10 / 10 394 / 394 / 394 12 / 12 / 10 472 / 472 / 394	10 / 10 / 10 394 / 394 / 394 12 / 12 / 12 472 / 472 / 472	10 / 10 / 10 394 / 394 / 394 12 / 12 / 12 472 / 472 / 472	10 / 10 / 10 394 / 394 / 394 12 / 12 / 12 472 / 472 / 472	10 / 10 / 10 394 / 394 / 394 12 / 12 / 12 472 / 472 / 472	10 / 10 / 10 394 / 394 / 394 12 / 12 / 12 472 / 472 / 472
ACCURACY											
Positioning	mm / inch	0.01 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 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
ATC											
Tool Storage "C" model - carrousel ATC "A" model - arm ATC		C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T	C-20T A-28T
Max. Tool Diameter	mm / inch	80 / 3.15 65 / 2.6	80 / 3.15 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6	90 / 3.5 65 / 2.6
Max. Tool Diameter (without neighbor tool)	mm / inch	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 5.1	160 / 6.3 130 / 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	250 / 9.8 250 / 9.8	250 / 9.8 250 / 9.8	250 / 9.8 350 / 9.8	250 / 9.8 350 / 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) for "A" type	sec.	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	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 Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw	Drawer Chip Screw
Air Pressure Requirement	kgs / lbs (per cm^2)	7/15	7/15	7/15	7/15	7/15	7 / 15	7 / 15	7 / 15	7 / 15	7/15
Power Requirement	KVA	20	20	30	30	30	30	30	30	30	30
Floor Space	mm / inch	1900x2200 / 75x87 2396x2200 / 94.3x87	2200x2200 / 87x87 2696x2200 / 1067x87	2900x2280 / 114x88 3066x2238 / 120.7x88	3300x2280 / 130x88 3366x2238 / 132.5x88	3700x2238 / 145.6x88 3816x2238 / 150.2x88	3400x2495 / 134x98 3466x2495 / 136x98	3800x2495 / 150x98 3866x2500 / 152x98	4300x3576 / 169x140 4820x3576 / 190x140	5150x3576 / 202x140 5670x3576 / 223x140	6200x3959 / 244x156 6720x3959 / 265x156
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 / 27778	14500 / 31967 14800 / 32628	18130 / 39969 18230 / 40190

Note : 1 year limited warranty
* All specification subject to change without notice.
* Rated HP by + remark is peak at short time. Accuracy quoted at 68° F on 8" steel reinforced concrete.
* Blue lines as standard specification for "XP" models.
* Red lines as standard for "A" model with arm type ATC.
* See Akira Seiki technical bulletin for additional details.

** All specification subject to change without notice.*

Performa Classic V series
Ultra High Power BT-40 VMC

V2•V2.5•V3•V4•V5•V4.5•V5.5
V6•V8•V10•plus XP

The Faster Road to Fine Finished Parts

Standard Features & Accessories:

- ✓ *Air chilling of inner spindle*
- ✓ *Pneumatic counter balance (for V2-V5.5)*
- ✓ *Coolant through head cartridge*
- ✓ *Spindle taper air blow*
- ✓ *Pre-tentioned ballscrews on all 3 axis*
- ✓ *Armless ATC by roller cam drive*
- ✓ *Full enclosed splash guard*
- ✓ *Rigid tapping*
- ✓ *Remote control MPG*
- ✓ *Heat exchanger for electrical cabinet*
- ✓ *Operation status lights, 3 levels*
- ✓ *Dual working light, sun lights*
- ✓ *2 Grundfos high pressure pumps for coolant and flush*
- ✓ *Coolant tank and chip case*
- ✓ *Automatic lubrication*
- ✓ *Water oil separation design*
- ✓ *Chip screw (standard for XP series)*
- ✓ *Leveling pads x 6 pcs*
- ✓ *Tools and toolbox kit*
- ✓ *Auto power off (M30)*
- ✓ *Air blow for parts (M07)*
- ✓ *Circular coolant nozzle at spindle nose (for "A" model only)*
- ✓ *Washing gun*

** All specification subject to change without notice.*

		SV550	SV760	SV815	SV1050	SV1300	SV1150	SV1350	SV1630	SV2060	SV2600
CONTROL SYSTEM		**Akira Mi645 (Fanuc code compatible)**									
TRAVEL											
X Axis Travel	mm / inch	550 / 21.7	762 / 30	815 / 32	1050 / 41.3	1300 / 51.2	1150 / 45	1350 / 53	1630 / 64	2060 / 81	2600 / 102.3
Y Axis Travel	mm / inch	435 / 17	435 / 17	540 / 21.3	540 / 19.8	540 / 21.3	640 / 25	640 / 25	850 / 33	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	860 / 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	950 x 480 / 37.4 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 / 0.70 x 3.15 x 4 slots	18 x 80 x 5 slots / 0.70 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.70 x 3.15 x 5 slots	18 x 80 x 5 slots / 0.70 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.70 x 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.15 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	800 / 1764	1000 / 2205	1200 / 2646	1300 / 2866	1400 / 3086	2000 / 4409	2300 / 5071	3000 / 6614	4000 / 8818	4000 / 8820
Standard Loading	kgs / lbs	600 / 1323	800 / 1764	900 / 1984	980 / 2160	1080 / 2381	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	2700 / 5952
SPINDLE											
Max. motor power (Peak)	HP	20	20	42	42	42	42	42	42	42	42
Max. Speed	rpm	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000
Spindle Taper	ISO40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40	BT40 / CAT40
Method of Spindle Chilling		Oil chilling	Oil chilling	Oil chilling	Oil chilling	Oil 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 / 1818	30 / 30 / 25 1181 / 1181 / 984
Cutting feed X / Y / Z	M / min ipm	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 47 / 472	12 / 12 / 12 472 / 472 / 472
ACCURACY											
Positioning	mm / inch	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 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 / ±0.00010	±0.003 / ±0.00012	±0.003 / ±0.00012	±0.003 / ±0.00012	±0.003 / ±0.00012
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 / 13.7	350 / 13.7	350 / 13.7
Max. Tool Weight	kgs / lb	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	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor	Chain type chip conveyor
Air Pressure Requirement	kgs / lbs (per cm^2)	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15
Power Requirement	KVA	25	25	35	35	35	35	35	35	35	35
Floor Space	mm / inch	2845x2200/112x87	3145x2200/124x87	3400x2238/134x88	3800x2238/150x88	4200x2280/165x88	3900x2495/154x98	4700x2495/185x98	5150x3576/203x140.7	6000x3570/236x140.7	7050x3959 / 278x156
Weight	kgs / lbs	4250 / 9370	4500 / 9920	6280 / 13845	7180 / 15829	7980 / 17953	8390 / 18497	8690 / 19158	13000 / 28660	15200 / 33510	19500 / 42990

Note: 1 year limited warranty
* All specification subject to change without notice.
* †Rated HP is peak at short time. Accuracy quoted at 68° on 8" steel reinforced concrete.
* †See Akira Seiki technical bulletin for additional details
* The applied tool holder and tool suggested to be modified at balance G2.5. "

** All specification subject to change without notice.*

SV series
Akira Super Vertical

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

Ever Faster Cut than Your Expect

Standard Features & Accessories:

- ✓Spindle oil chiller
- ✓Pneumatic counter balance (for SV550-SV1350)
- ✓Coolant through head cartridge
- ✓Spindle taper air blow
- ✓Pre-tentioned ballscrews on all 3 axis
- ✓Quick arm type ATC
- ✓Ultra large capacity tool storage
- ✓Enclosure splash guard
- ✓Rigid tapping
- ✓Remote control MPG
- ✓Heat exchanger for electrical cabinet
- ✓Operation status lights, 3 levels
- ✓Dual working light
- ✓High pressure coolant flush,
- ✓ 2 Grundfos for coolant pumps
- ✓Coolant tank and chip case
- ✓Automatic lubrication
- ✓Disk type water oil separation kit
- ✓Chain type chip conveyor
- ✓Leveling pads x 6 pcs
- ✓Tools and toolbox kit
- ✓Auto power off (M30)
- ✓Air blow for parts (M07)

** All specification subject to change without notice.*

		HV4.5A	HV5.5A	HV6A	HV8A	HV10A
CONTROL SYSTEM		**Akira Mi645 (Fanuc code compatible)**				
TRAVEL						
X Axis Travel	mm / inch	1150 / 45	1350 / 53	1630 / 64	2060 / 81	2600 / 102
Y Axis Travel	mm / inch	640 / 25	640 / 25	850 / 33.5	850 / 33.5	1030 / 40.5
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
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 3.15 x 5 slots	18 x 100 x 5 slots / 0.7 x 3.15 x 5 slots	18 x 125 x 6 slots / 0.70 x 4.9 x 6 slots	18 x 125 x 6 slots / 0.7 x 4.9 x 6 5 slots	18 x 125 x 7 slots / 0.7 x 4.9 x 7 slots
Max. Loading	kgs / lbs	2000 / 4409	2300 / 5071	3000 / 6614	4000 / 8818	4000 / 8820
Standard Loading	kgs / lbs	1300 / 2866	1500 / 3307	2300 / 5071	2700 / 5952	2700 / 5952
SPINDLE SYSTEM						
Max. Motor Power (Peak)	HP+	42	42	42	42	42
Max. Motor Power (30min)	HP	35	35	35	35	35
Max. Speed	rpm	8000	8000	8000	8000	8000
Spindle Taper	ISO50	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	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
ACCURACY						
Positioning	mm / inch	0.001 / 0.00039	0.001 / 0.00039	0.001 / 0.00039	0.001 / 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
ATC						
Tool Storage arm ATC		28T	28T	28T	28T	28T
Max. Tool Diameter	mm / inch	102 / 4	102 / 4	102 / 4	102 / 4	102 / 4
Max. Tool Diameter (without neighbor tool)	mm / inch	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9	150 / 5.9
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 / 93	400 / 106	640 / 169	700 / 185	900 / 238
Chip Disposal		Drawer	Drawer	Drawer	Drawer	Drawer
Air Pressure Requirement	kgs / lbs (per cm^2)	7 / 15	7 / 15	7 / 15	7 / 15	7 / 15
Power Requirement	KVA	35	35	35	35	35
Floor Space	mm / inch	3400x2495 / 134x98	3800 x 2495 / 150 x 98	4300 x 3576 / 169 x 140.7	5150 x 3576 / 202.7 x 140.7	6200 x 3959 / 244 x 156
Weight	kgs / lb	8510 / 18761	8810 / 19423	13120 / 28925	15320 / 33775	19800 / 43652

Note: 1 year limited warranty
* All specification subject to change without notice.
* †Rated HP is peak at short time. Accuracy quoted at 68° on 8" steel reinforced concrete.
* Blue line for optional " chain 40T tool magzine".
* †See Akira Seiki technical bulletin for additional details

HV-A series

Akira Superior Speed Heavy Duty

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

Advance Faster BT50 Cut than Your Expect

Standard Features & Accessories :

- ✓Spindle oil chiller
- ✓Coolant through head cartridge
- ✓Spindle taper air blow
- ✓Pre-tentioned ballscrews on all 3 axis
- ✓Quick arm type ATC
- ✓Enclosure splash guard
- ✓Rigid tapping
- ✓Remote control MPG
- ✓Heat exchanger for electrical cabinet
- ✓Operation status lights, 3 levels
- ✓Dual working light
- ✓High pressure coolant flush,
- ✓2 Grundfos for coolant pumps
- ✓Coolant tank and chip case
- ✓Automatic lubrication
- ✓Water oil separation design
- ✓Chain type chip conveyor
- ✓Leveling pads x 6 pcs
- ✓Tools and toolbox kit
- ✓Auto power off (M30)
- ✓Air blow for parts (M07)

Akira Heavy Duty

** All specification subject to change without notice.*