

MACHINE SPECIFICATIONS

MODEL		K700 FX			K700 PC			K35 5AX			K25 5AX-2C			
TRAVEL	X Axis	mm	700			700			700			700		
	Y Axis	mm	450			450			450			450		
	Z Axis	mm	420			420			420			420		
	A Axis	°	-			-			-30~+120			-30~+120		
	C Axis	°	-			-			360			360		
	Table To Spindle Nose	mm	150~570			150~570			150~570			150~570		
	Servo Motor XYZ (Mitsubishi /Fanuc)	kw	3.0/3.0/3.0			3.0/3.0/3.0			3.0/3.0/3.0			3.0/3.0/3.0		
TABLE	Table Size	mm	1280x500			750x450- 2PCS			C AXIS ø350			C AXIS ø250 x2		
	Max. Load	kgs	700			250x2			100(Horizontal)/70(Vertical)			75X2(Horizontal)/40X2(Vertical)		
	T Slots		T18x5			T14x5			12H7x4x90°			12H7x4x90°		
	Max. Work Area	mm	700Lx450Wx420H			700Lx450Wx420H			350x300L			255x300L		
SPINDLE	Spindle Taper		BT#40	HSK A50	HSK A63	BT#40	HSK A50	HSK A63	BT#40	HSK A50	HSK A63	BT#40	HSK A50	HSK A63
	Pull Studs		MAS-403-45	-	-	MAS-403-45	-	-	MAS-403-45	-	-	MAS-403-45	-	-
	Spindle Speed	rpm	10000			10000			10000			10000		
	Spindle Motor	kw	7.5			7.5			7.5			7.5		
MAGAZINE	Transmission		Direct Drive			Direct Drive			Direct Drive			Direct Drive		
	Magazine Capacity		24	30	24	24	30	24	24	30	24	24	30	24
	Drive Type		Servo Drive			Servo Drive			Servo Drive			Servo Drive		
	Max. Tool Weight	kgs	4	3	4	4	3	4	4	3	4	4	3	4
	Max. Tool Diameter	mm	100	80	100	100	80	100	100	80	100	100	80	100
	Max. Tool Length	mm	300			300			300			300		
	Atc Time (C-C/T1-T2)	sec.	4			4			4			4		
FEED RATE	Rapid Traverse (G00)	m/min	48/48/48			48/48/48			48/48/48			48/48/48		
	Cutting Feed Rate (G01)	mm/min	10000			10000			10000			10000		
MACHINE DIMENSIONS	WxDxH	mm	1720/3200/2950			1720/3860/2950			1720/3200/2950			1720/3200/2950		
	Net Weight	Kgs	6400			7300			6600			6720		
OPTIONAL ACCESSORIES	High Speed Spindle Upgrade		12000/15000	20000 (Built-in)	12000/15000	20000 (Built-in)	12000/15000	20000 (Built-in)	12000/15000	20000 (Built-in)	12000/15000	20000 (Built-in)		
	Motor Power Upgrade		11Kw			11Kw			11Kw			11 Kw		
	Coolant Through Spindle		△			△			△			△		
	SK-40,CAT-40 Magazine & Spindle		△			△			△			△		
	NBT40,BBT40 Spindle		△			△			△			△		
	Three Axes Linear Scale		△			△			△			△		
	A/C Axes Scale		×			×			△			△		
	Chip Conveyor : Chain /Scrapper /Filter Type		△			△			△			△		
	Automatic Door		△			△			△			△		
	Automatic Tool Length Measurement With Breakage Detection		△			△			△			△		
	Air Conditioner For Electronic Cabinet		△			△			△			△		
	Transformer, Voltage Regulator		△			△			△			△		
	Coolant Gun/ Air Gun		△			△			△			△		
	4TH / 5TH Axis Rotary Table		△			△			-			-		
	Work Table Lower 100mm		△			-			-			-		

● All specifications are subject to change without notice. ○:Standard △:Optional ×:Not available

STANDARD ACCESSORIES

- Spindle air blow device
- Chip flushing system
- Work light
- Electrical cabinet
- Coolant system
- Automatic lubrication system
- Dual-color LED alarm light
- Chiller(Spindle speed 12000/15000/20000rpm)
- Tool kits and tools
- TFT LCD monitor
- Hydraulic unit (5AX -standard, for others- optional)
- Spindle oil/air mist lubrication system (Built-in spindle -standard, for others- optional)
- Chip collecting tray and coolant tank



TAIWAN MACHINE TOOL CO., LTD.

No. 56, Sec. 1, Jinma Rd., Changhua City, 50089, Taiwan
 TEL:+886-4-7381008 FAX: +886-4-7387099



**FULL COLUMN TRAVEL GANTRY TYPE
 COMPACT MACHINING CENTER**

K700 FX/ K700 PC
 K35 5AX/ K25 5AX-2C

K Series

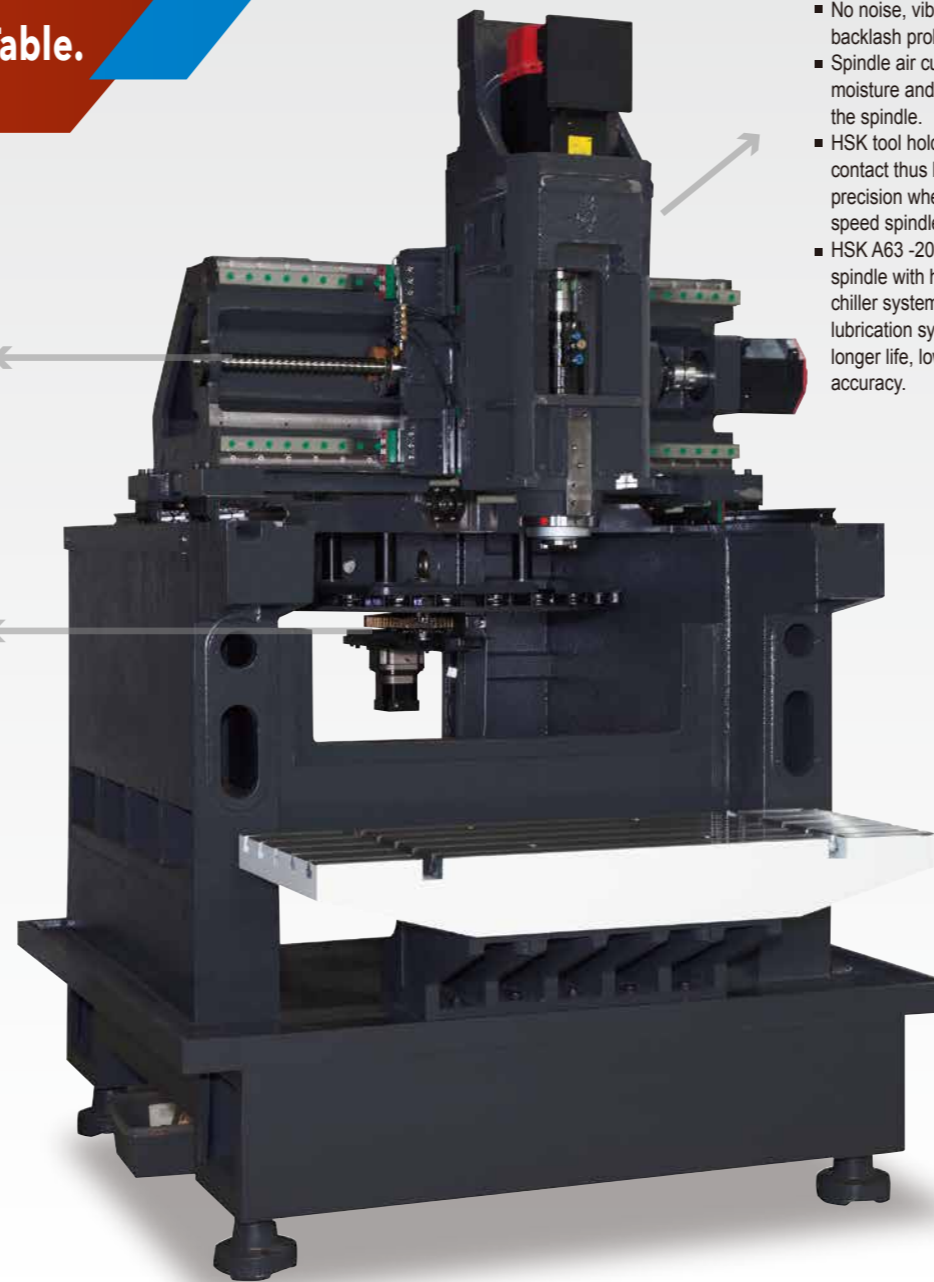


**Meticulous Design, Is Your Best Choice In Precision Finishing.
Multi-performace, While Satisfy Different Machining Demand.
Work Table Can Be Mounted With Apc, 5 Axes Or Fix Table.**

- High cutting rigidity with Gantry type structure design.
- Compact design less floor occupation.
- Without carrying ATC system on moving parts to make it lighter, make sure cutting without vibration.
- Cutting area isolation to ensure the transmission system life longer and easier to install linear scale.
- High efficiency servo drive ATC system, C-C (T1-T2)only 4 sec., with high stable performance.
- ATC install at the center of basement to reduce the width of the machine to save the walking steps to loading & unloading workpiece.
- FX model with long table have flexibly working area, good for long workpiece or in full travel on installing rotary table without wasting any space.
- Could have single C axis 350mm, two heads C axis 250mm or 105mm with four C axis; Integrated radial & axial bearing design to enhance accuracy.
- PC model installed cam type pallet change system with 3-pieces coupling inside design, and adopt encoder to replace the limit switch to confirm the precision.
- Having the advantage to prevent chips go into the pallet change system and easy to install rotary table and power source comparing with kenn type M/C.
- Y axis linear guide with chromate finish and anti-rusty treatment, With two pieces wipers to prevent chips to affect accuracy.

Lighter Traveling Column Design
Can achieve moving faster without vibration.

Servo Drive ATC
Fast and stability (C-C /4 sec.)
ATC install at the center of basement to reduce the width of the machine and the weight of moving parts.



Direct Drive Spindle BT40/HSK A 50/HSK A 63

- No noise, vibration and backlash problems.
- Spindle air curtain, prevents moisture and chips going into the spindle.
- HSK tool holder with two faces contact thus high rigidity and precision when install high-speed spindle.
- HSK A63 -20000 rpm built-in spindle with high efficiency chiller system and mist lubrication system to apply longer life, low heat and accuracy.

*Compact Design Less Floor Occupation.
High Performance ! High Efficiency !
Optimal Structure Design ! Maximum Stability!*

High Precision, Fast Pallet Change System

- The work table adopted the cam type 3-pieces coupling system.
- High speed 180° rotary pallet change system (4 sec.).
- High stable with accuracy without chips problem.
- Easier to install rotary table and power source for fixture.



Powerful Single C Axis 350mm Rotary Table

- Good at complicated and high accuracy demanded work.



Powerful Double C Axis 255mm Rotary Table

- Good at multi-faces machining to save working hours on ATC time.
- For mass production will be more friendly in automation system.



High Load Capacity Fix Table

- Could load up to 700 kgs, table size achieve 1280mm.
- Good at machining long workpieces, when installing rotary table without any wasting space almost full travel could be used.



CONTROL SPECIFICATIONS

	MITSUBISHI					FANUC	
	M70-VB	M70-VA	M80-VB	M80-VA	M720-VS	Oi-MF(P3)	Oi-MF(P1)
CPU	64 BIT					32 BIT	
Max. Controlled Axes	9	11	9	11	12	6	9
Max. Simultaneous Axes	4					4	
Program Storage Length	512K					512K	
Macro Variables Common	700					700	
Tool Offset Sets	400					400	
Conversational Programming	○					○	
Display	8.4" TFT LCD			10.4" TFT LCD		8.4" TFT LCD	
Multi-language Display	○					○	
Servo System with ABS. Encoder	○					○	
Memory Card Front-loading	○					○	
Ethernet	○					○	
High Speed And Accuracy Machining Code	G05.1 Q1	G05 P10000	SSS	SSS	SSS	G05.1 Q1	
RS-232 Interface	○					○	
Toolpath Simulation	○		3D			○	
Handwheel Feed Program Simulation	○					×	
Program Buffer Correction	○					×	



• The control panel is placed to achieve the optimum operation ergonomics.

○ : Standard
× : None

QUALITY CONTROL



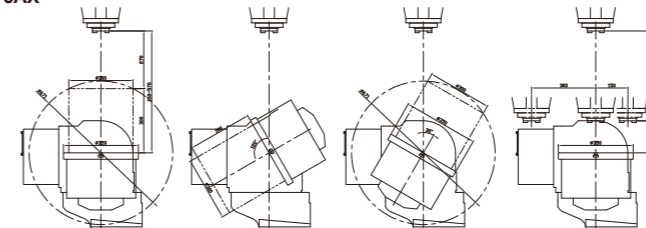
● Test report (circularity)



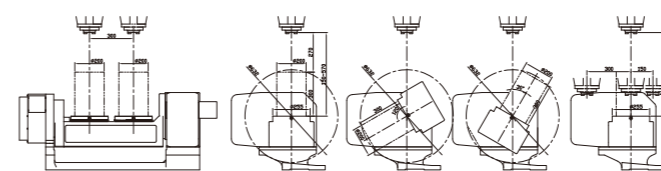
- The positioning accuracy is inspected by using Agilent laser unit.
- All machine are measured and calibrated by ball bar testing equipment.

PROCESSING RANGE

K35 5AX



K25 5AX-2C



DIMENSIONS

	A	B	C
K700 FX	1720	3200	2950
K700 PC	1720	3860	2950
K35 5AX	1720	3200	2950
K25 5AX-2C	1720	3200	2950

