

HYUNDAI WIA

High Speed & Productivity Vertical Machining Center

KF-II Series

KF4600 II | KF5600 II | KF6700 II | KF5600L II | KF5600/50 II | KF6700/50 II

Technical Leader ▶

State-of-the-art Vertical Machining Center with High-speed and large work space

The Vertical Machining Center KF-II Series, designed by Hyundai WIA with years of expertise and the latest technology, maximizes productivity while maintaining rigidity and accuracy.

ITEM	Direct Spindle					Tool Shank		ATC			
	8,000	*8,000	10,000	12,000	15,000	BBT40	BBT50	24 EA	30 EA	40 EA	60 EA
KF4600 II	●	○	○	○	○	●			●	○	
KF5600 II	●	○	○	○	○	●			●	○	○
KF6700 II	●	○	○	○	○	●			●	○	○
KF5600L II	●	○	○	○	○	●			●	○	
KF5600/50 II		●					●	●			
KF6700/50 II		●					●	●	○		

* High-Torque Spindle

● : Standard ○ : Option

KF-II Series

High Speed & Productivity Vertical Machining Center

- High-precision machining by improved spindle quality
- High-speed roller type LM guide in all axes
- Enhanced chip processing capabilities by applying the upper-type conveyor
- Various motors and columns provided for customized machining
- Improved user convenience by applying the latest controller of FANUC



01 BASIC STRUCTURE

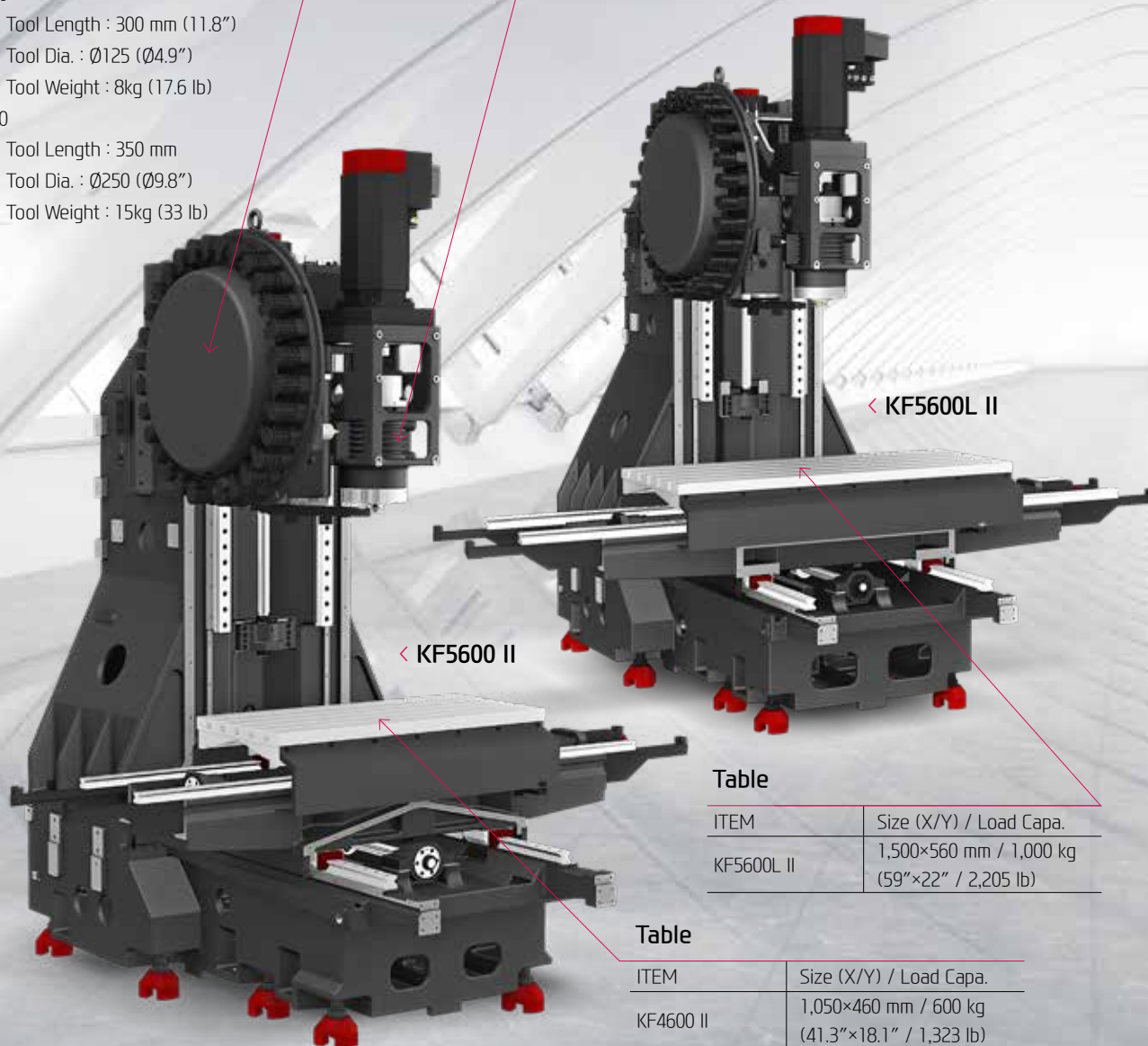
High Speed & Productivity Vertical Machining Center

Magazine

- BBT40
Max. Tool Length : 300 mm (11.8")
Max. Tool Dia. : Ø125 (Ø4.9")
Max. Tool Weight : 8kg (17.6 lb)
- BBT50
Max. Tool Length : 350 mm
Max. Tool Dia. : Ø250 (Ø9.8")
Max. Tool Weight : 15kg (33 lb)

High Precision Spindle

- BBT40 : KF4600 II, KF5600 II, KF5600L II, KF6700 II
- BBT50 : KF5600/50 II, KF6700/50 II
- Spindle Type : Direct



Table

ITEM	Size (X/Y) / Load Capa.
KF5600L II	1,500×560 mm / 1,000 kg (59"×22" / 2,205 lb)

Table

ITEM	Size (X/Y) / Load Capa.
KF4600 II	1,050×460 mm / 600 kg (41.3"×18.1" / 1,323 lb)
KF5600 II Series	1,250×560 mm / 1,000 kg (49.2"×22" / 2,205 lb)
KF6700 II Series	1,500×670 mm / 1,300 kg (59"×26.4" / 2,866 lb)

HIGH-PRECISION, SPEED & LARGE WORKING AREA

HIGH-PRECISION STRUCTURE

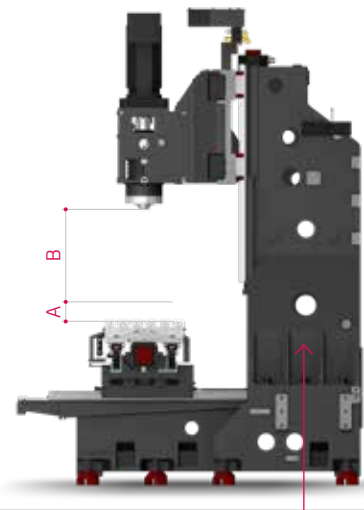
Optimal Structural Analysis

KF-II Series is designed to have optimal structure through Hyundai WIA's unique structural analysis.

In particular, enhancement of bed and column's rigidity makes excellent performance even in heavy duty cutting.

One Piece High Column (Direct Sp.)

One piece high column is provided as an option up to z-axis height. This option helps to process bigger products such as rack housing.



Incomparably Strong Rigidity Compared to the Block-type High Column

ITEM		Travel of Z-Axis	Height of High Column	A	B
KF4600 II	Std. Column	520 mm (20.5")	-	150 mm (5.9")	150~670 mm (5.9"~26.4")
	High Column	520 mm (20.5")	200 mm (7.9")	350 mm (13.8")	350~870 mm (13.8"~34.3")
KF5600 II	Std. Column	520 mm (20.5")	-	150 mm (5.9")	150~670 mm (5.9"~26.4")
	Opt. 635mm	635 mm (25")	-	150 mm (5.9")	150~785 mm (5.9"~30.9")
	High Column	635 mm (25")	300 mm (7.9")	450 mm (17.7")	450~1,085mm (17.7"~42.7")
KF5600/50 II	Std. Column	520 mm (20.5")	-	200 mm (7.9")	200~720 mm (7.9"~28.3")
	Opt. 635mm	635 mm (25")	-	200 mm (7.9")	200~835 mm (7.9"~32.9")
	High Column	635 mm (25")	300 mm (7.9")	500 mm (19.7")	500~1,135mm (19.7"~44.7")
KF6700 II	Std. Column	635 mm (25")	-	150 mm (5.9")	150~785 mm (5.9"~30.9")
	High Column	635 mm (25")	300 mm (7.9")	500 mm (19.7")	450~1,085mm (17.7"~42.7")
KF6700/50 II	Std. Column	635 mm (25")	-	200 mm (7.9")	200~835 mm (7.9"~32.9")
	High Column	635 mm (25")	300 mm (7.9")	500 mm (19.7")	500~1,135mm (19.7"~44.7")
KF5600L II	Std. Column	520 mm (20.5")	-	150 mm (5.9")	150~670 mm (5.9"~26.4")

- High column can be applied to column with Z-axis traverse distance of 635mm for KF5600 II (520mm Standard column + 300mm High column cannot be applied)

❖ High Column : Option

02 HIGH-SPEED FEED

Highest Quality, High-speed Vertical Machining Center

[] : Option

Travel (X/Y/Z)

KF4600 II

900/460/520 mm

(35.4"/18.1"/20.5")

KF5600 II

1,100/560/520 [635] mm

(43.3"/22"/20.5" [25"])

KF6700 II

1,300/670/635 mm

(51.2"/26.4"/25")

KF5600L II

1,300/560/520 mm

(51.2"/22"/20.5")

KF5600/50 II

1,100/560/520 mm

(43.3"/22"/20.5")

KF6700/50 II

1,300/670/635 mm

(51.2"/26.4"/25")

Rapid Traverse Rate (X/Y/Z)

KF4600 II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

KF5600 II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

KF6700 II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

KF5600L II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

KF5600/50 II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

KF6700/50 II

36/36/30 m/min

(1,417/1,417/1,181 ipm)

REDUCED NON-CUTTING TIME & IMPROVED FEED PRECISION

GUIDE WAY

High-Speed Roller LM Guideway

Linear roller guideways are applied to reduce non-cutting time and bring high rigidity. Each axis is directly connected to a highly reliable digital servo motor to provide high rigidity and minimal thermal displacement.

Improvement in Slide Cover

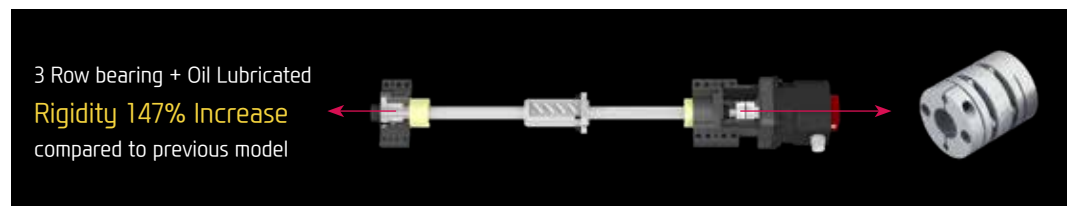
The increased slope of slide cover makes chip disposal easier and minimizes slide cover breakage.



Double Anchored Ball Screw

The pretensioned ball screw minimizes the expansion and contraction according to the heat and further reinforces the rigidity by the double anchor support method.

In addition, the coupling of the ballscrews and the highly reliable digital servo motors are connected by **metal plate couplings**, to reduce coupling breakage and backlash.



Increase in Durability of Z-axis ball screw

Lifetime of the bearing has been greatly increased by optimizing the spindle structure and lubrication method.

※ Customer Actual Data



03 HIGH PRECISION SPINDLE

Excellent machining performance with high-precision spindle

KF4600 II/5600 II/6700 II Spindle Specifications

NC	Speed r/min	Motor (Max./Cont.)	Torque (Max./Cont.)	Type
HYUNDAI WIA FANUC SMART PLUS	8,000/10,000 rpm	18.5/11 kW (25/15 HP)	118/52.5 N·m (87/38.7 lbf·ft)	Direct
	8,000 rpm (KF6700 II)	18.5/15 kW (25/20 HP)	118/71.6 N·m (87/52.8 lbf·ft)	
	8,000 rpm (High-torque)	15/11 kW (20/15 HP)	286/143 N·m (210.9/105.5 lbf·ft)	
	12,000 rpm	18.5/11 kW (25/15 HP)	118/52.5 N·m (87/38.7 lbf·ft)	
	15,000 rpm	18.5/11 kW (25/15 HP)	118/52.5 N·m (87/38.7 lbf·ft)	
HYUNDAI-iTROL	12,000 rpm	16.2/8.5 kW (21.7/11.4 HP)	119.7/63 N·m (88.3/46.5 lbf·ft)	
HEIDENHAIN	12,000 rpm	17/10 kW (22.8/13.4 HP)	108.6/63.7 N·m (80/47 lbf·ft)	

KF5600/50 II | KF6700/50 II Specifications

NC	Speed r/min	Motor (Max./Cont.)	Torque (Max./Cont.)	Type
H/W FANUC SMART PLUS	8,000 rpm	22/11 kW (30/15 HP)	353.2/143.2 N·m (260.5/105.6 lbf·ft)	Direct

HIGH-PERFORMANCE, HIGH-PRECISION SPINDLE

SPINDLE

Direct Driven Spindle

The directly coupled spindle at a maximum revolution of 15,000rpm, allows high-speed processing. Additionally, the large diameter and the thickness of the spindle add to the stability of the machine.

(KF5600/50 II, KF6700/50 II : 8,000rpm)

Spindle Cooling (Over 10,000 rpm / BT50 : 8,000 rpm Std.)

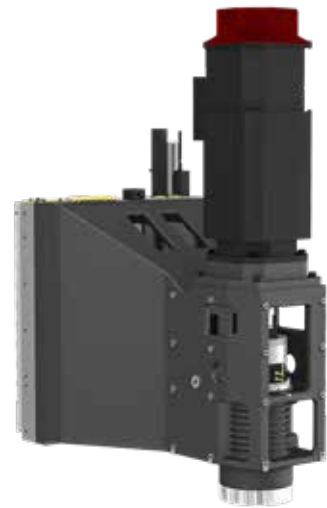
The spindle cooling system minimizes thermal displacement which can happen during lengthy machining operations, and offers continued accuracy based on the thermal stability.

❖ Improved cooling capability with chilling through head frame

Through Spindle Coolant (20/30/70 bar) **OPTION**

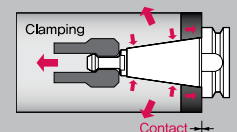
Through Spindle Coolant is exceedingly useful when drilling deep holes. It helps increase the lifetime of the tool, while decreasing cycle time.

The improved quality of rotary joint prevents oil leakage.



Dual Contact Spindle

The Big Plus spindle system (BBT40) provides dual contact between the spindle face and the flange face of the tool holder.



❖ Direct Spindle - Hybrid Tool Lock : Reducing heat and noise by removing the hydraulic motor

HSK TOOL HOLDER

OPTION

HSK tool holder is utilized for precise positioning with less expansion in the spindle taper during high speed rotation. This ensures an excellent level of precision for die mold machining.



HSK Tool

04 ATC & MAGAZINE

High Productivity Achieved with High Rigidity, Accuracy Machining

ATC & Magazine

[] : Option

Model	No. of Tools	Max. Tool Length	Max. Tool Dia. (W.T/W.O)	Max. Tool Weight	Tool Shank
KF4600 II	30 [40] EA	300 mm (11.8")	30T : Ø80/125 mm (Ø3.1"/Ø4.9") [40, 60T : Ø76/125 mm (Ø3"/Ø4.9")]	8 kg (18 lb)	BBT40 [HSK-A63]
KF5600 II	30 [40, 60] EA				
KF6700 II					
KF5600L II	30 [40] EA				
KF5600/50 II	24 EA	350 mm (13.8")	Ø125/Ø250 mm	15 kg (33 lb)	BBT50 [HSK-A100]
KF6700/50 II	24 [30] EA				

HIGH RIGIDITY, TOOL CHANGE SYSTEM

ATC & MAGAZINE

High Speed ATC

Position control through twin arm ATC on servo motors has been improved drastically. In addition, tool exchanging has become easier, reducing specific cutting time tremendously.

Position control on the Twin Arm ATC has improved drastically. The twin arm ATC enables faster tool change and increased productivity.



Tool Change Time (C-C)

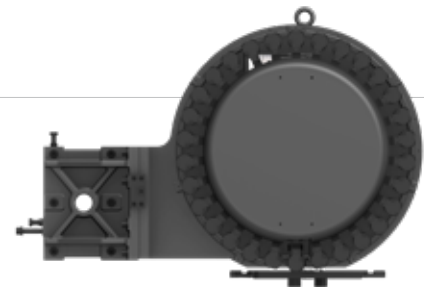
KF4600 II : 3.2 sec KF5600 II : 3.2 sec KF5600L II | KF6700 II : 3.5 sec

(KF5600/50 II | KF6700/50 II : 5.5 sec)

Magazine

The tool magazine holds **30 tools** as standard and **60 tools** as an option. Due to the wider selection of tools and the random tool selection method, tool change time has improved.

(KF4600 II / KF5600L II : Opt. 40 tools)



[Fixed : Option]

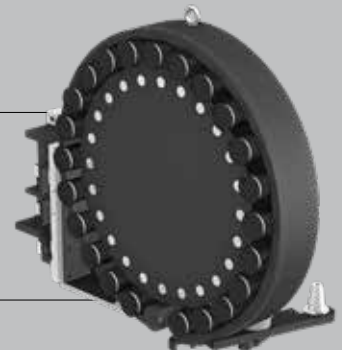
BBT50 ATC & MAGAZINE

BBT50 (KF5600/50 II | KF6700/50 II)

KF5600/50 II, KF6700/50 II provides a tool magazine of 24 tools as standard.

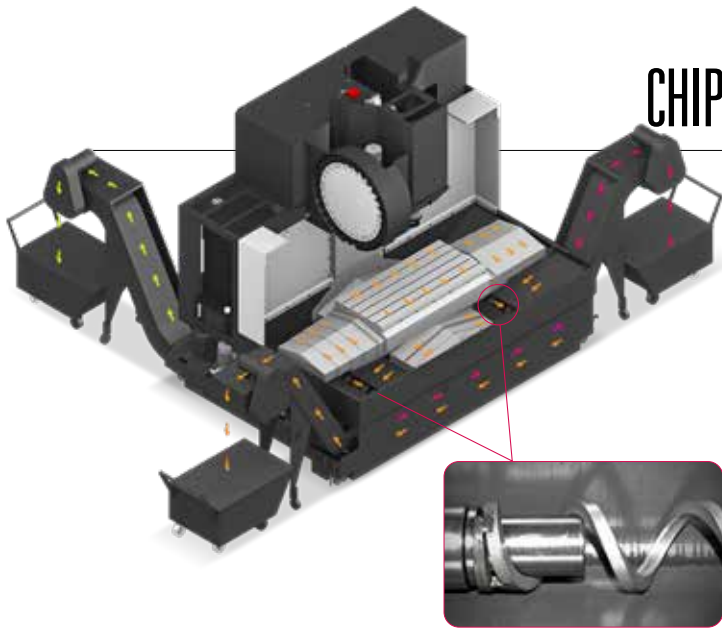
Also, ATC with high precision CAM provides fast and accurate tool change, reducing non-cutting time.

(KF6700/50 II : Opt. 30EA)



05 USER CONVENIENCE

Various Devices for User Friendly



CHIP DISPOSAL SOLUTION & COOLANT UNIT



Cutting Air Blow (Opt.)



Bed Flushing Coolant (Opt.)



Gun Coolant (Opt.)



Air Gun (Opt.)

Interior Screw Chip Conveyor (Forward / Backward Rotation Function)

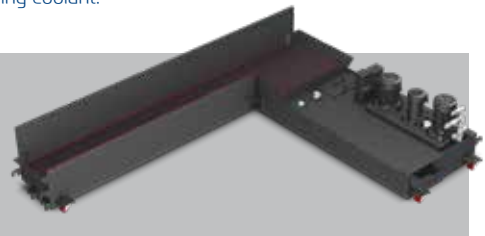
Dual screw type chip conveyors are located at each side of the bed which makes it convenient to remove chips. The interior screw and the chip conveyor operate at the same time and can be controlled separately at the time of prior consultation.

(Three screws for rear-type conveyor: 2 sides + 1 front)

Furthermore, chip disposal capability significantly has been improved due to optional bed-flushing coolant.

Upper-type Conveyor (Std.)

The upper type chip conveyor is applied as a standard to efficiently remove chips generated during machining. In addition, the 365 liter (KF5600II, 6700II) of large coolant tank provides a seamless machining environment even with large amounts of coolant.



Hinge	Chip Type : Roughing Chip, Long Chip, Chip complex	Material : SS41, 45C, Cast Steel	Side/Rear Direction
	Highly efficient when disposing a lot of chips. Capable of handling stringy chips..		
Scraper	Chip Type : Finely broken chip blown out	Material : cast Iron, Nonferrous	
	Convenient for shortly cut chips.		
❖ Screw	Chip Type : The lower portion of micro-chips	Material : Steel, Casting	
	Compresses and ejects chips to reduce chip Trouble.		
❖ Drum Filter	Chip Type : Powder, Micro Chip	Material : AL	
	Advantageous in precision, as the chips do not flow in to the coolant nozzle.		

❖ When ordering a screw or drum filter chip conveyor, prior consult with hyundai wia's sales person.

Optional

PRECISION SYSTEM



Linear Scale

Linear scales increase positioning accuracy and reduce distortion caused by thermal growth, thus ensuring a more accurate finished part



Touch Sensor

Workpiece coordinate values can be set automatically using the optional spindle probe.



TLM (Laser & Touch)

Tool lengths and diameters can be set automatically using the optional tool setter. This can also be used to monitor attrition and detect broken tools.

ECO SYSTEM



Oil-skimmer

Separated oil-skimmer and coolant tank to keep coolant free of tramp oils.



Automatic Grease Supply Unit

Optional automatic grease lubrication eliminates the need for an oil skimmer and significantly reduces maintenance costs against oil lubrication.



MQL (Minimal Quantity Lubrication)

The goal of this system is to spray only the amount of lubricant required to prevent heat and chip build up at the cutting tool or work piece face.



NC ROTARY TABLE & HYDRAULIC SUPPLY UNIT

Various shapes of products can be processed when using NC Rotary Table. In addition, 100 bar of high pressure hydraulic unit for the fixture increases the tightening power of the teeth.

06 HYUNDAI WIA FANUC – SMART PLUS

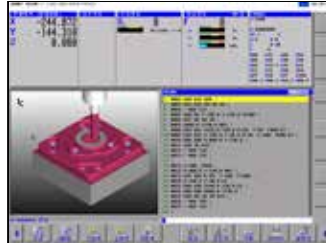
The Compatible All-round Control



15" Touch-type Monitor as a standard

Smart Machine Control	Fast Cycle Time Technology
Conversational Program	Fine Surface Technology
i-HMI	SmartGuide-i
AI Contour Control	Machining-aid Function
Smooth Tolerance Control	AICC-2 (200 blocks)
JERK Control	0.1 μ m command and specify tolerance
Machining Condition Selection	Diminished vibration by controlling acceleration speed
Machining Quality Control Function	Designated machining level based on speed & quality
Part Program Storage	Smooth Tolerance+ integrated support
No. of Registerable Programs	5120M (2MB)
	1000 EA

SMART SOFTWARE



DIALOGUE PROGRAM (Smart Guide-i)

This software offers maximum user convenience through a dialogue program from setup to machining. This includes writing machining programs and simulation checks.



High-quality Machining S/W

1. Tool Monitoring (HW-TM) **OPTION**

This tool status monitoring software monitors and protects workpiece, tools, and equipment through real-time monitoring of the motor load from machining.

2. Adaptive Feed Control (HW-AFC)

This software improves the lifetime and productivity of tools by automatically controlling the feed to maintain an even machining load.

3. Thermal Displacement Compensation (HW-TDC) **OPTION**

This software improves machining precision by minimizing thermal deformation from changes in external environments and machining.

4. Machining Condition Selection (HW-MCS)

This software automatically optimizes rapid transfer parameters for cutting transfers and workpiece weights depending on the machining type (based on rate/precision /quality)



Machining Support S/W

1. Machine Guidance (HW-MCG)

This software offers various user convenience functions such as tool manipulation, maintenance, tool monitoring, and a pop-up/status window

2. Tool/Workpiece Measurement (Renishaw GUI) **OPTION**

This user convenience GUI software measures material coordinate systems, tool lengths/diameters/damage to tools (included in Renishaw H/W set)



3. LAUNCHER

This software offers shortcuts for quick access to specialized features and frequently used features.

4. Premium Tool Operation

This software offers premium graphic functions for more intuitive tool operation.



5. Manual Viewer

This software enables users to view electronic manuals right from the tool.

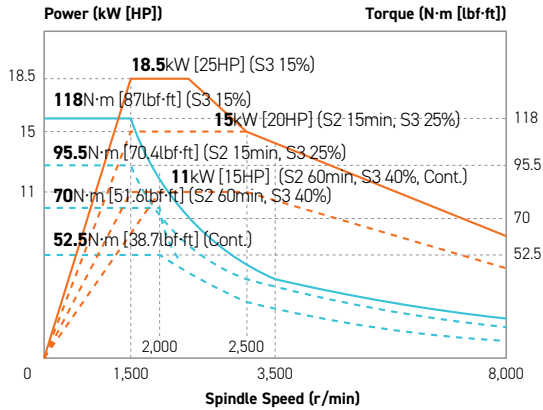
6. Scheduling

This software enables viewing/setting up directly from the tool. This allows such actions as managing customer's tool schedules and schedule notification.

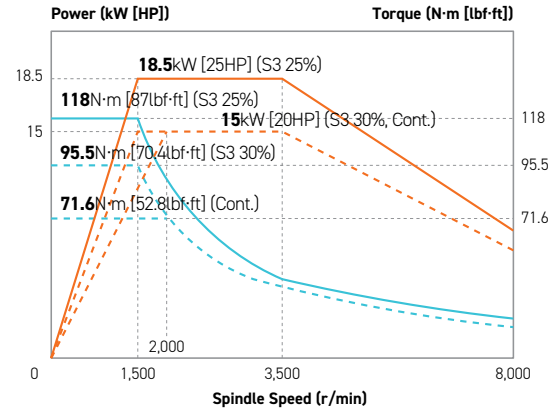
SPECIFICATIONS

Spindle Output/Torque Diagram

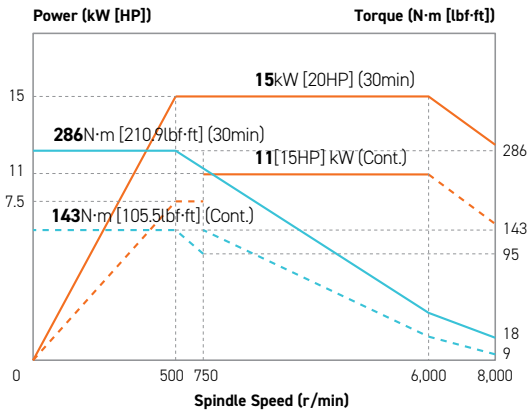
Direct 8,000rpm (KF4600II/5600II)



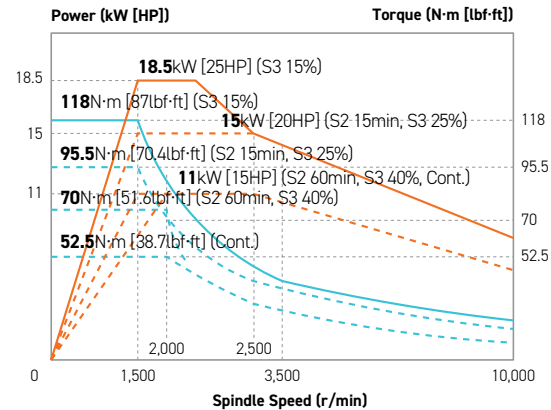
Direct 8,000rpm (KF6700II)



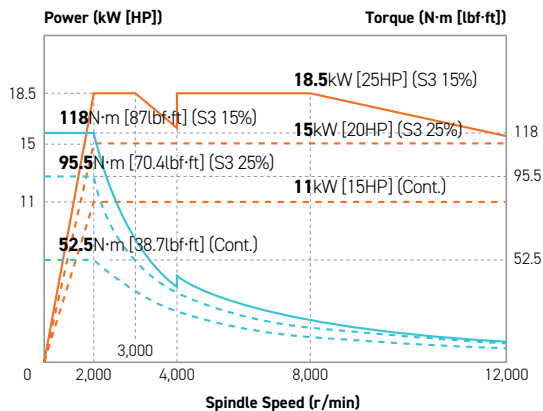
Direct 8,000rpm (High-Torque)



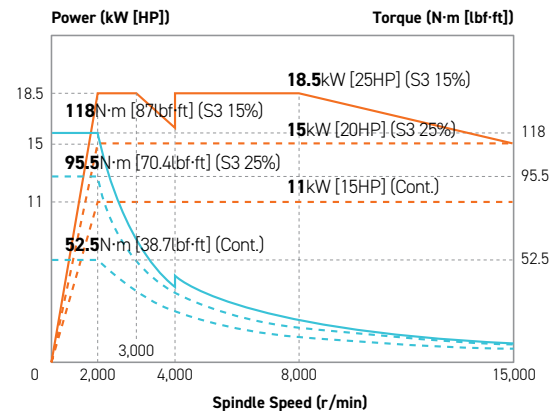
Direct 10,000rpm



Direct 12,000rpm



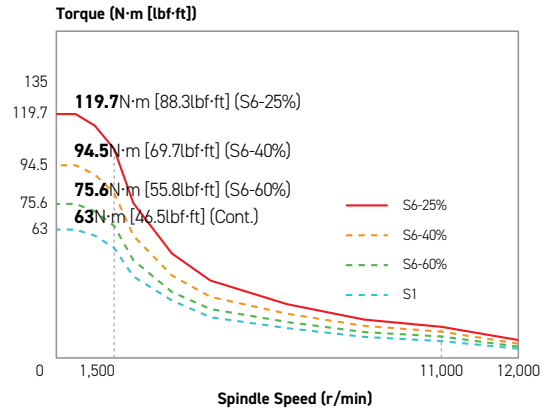
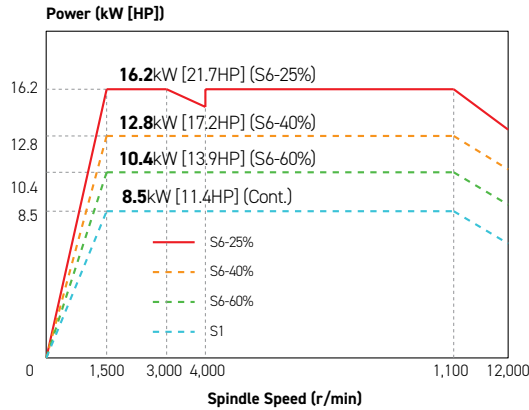
Direct 15,000rpm



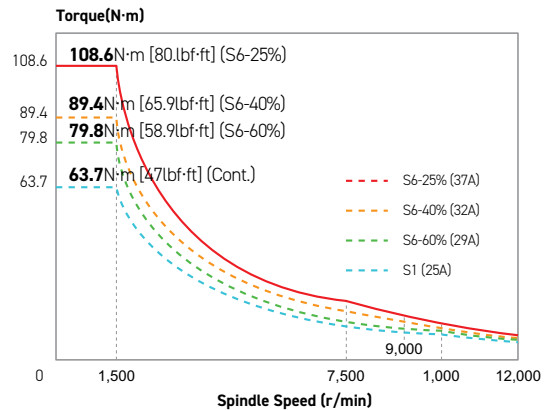
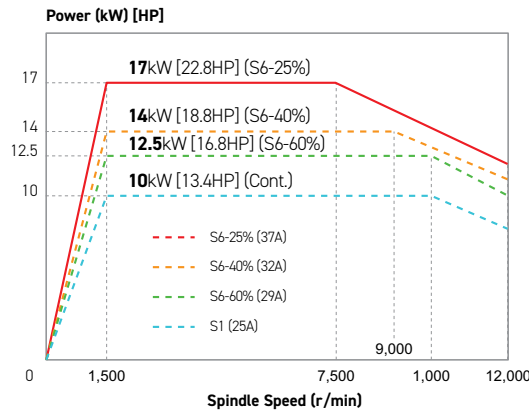
SPECIFICATIONS

Spindle Output/Torque Diagram

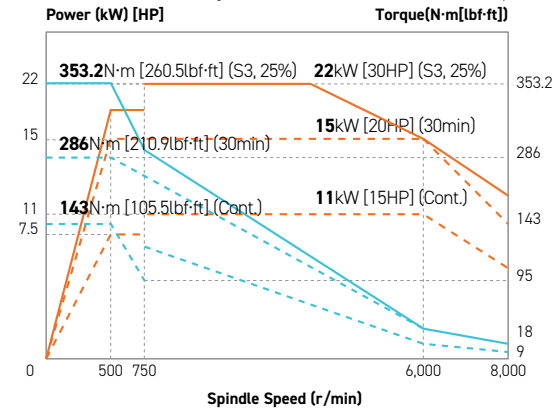
iTROL Direct 12,000rpm



HEIDENHAIN Direct 12,000rpm



KF5600/50 II | KF6700/50 II Direct 8,000rpm



SPECIFICATIONS

Standard & Optional

Spindle		KF4600 II
8,000rpm	FANUC	●
8,000rpm (High-torque)	FANUC	○
10,000rpm	FANUC	○
12,000rpm	FANUC	○
15,000rpm	FANUC	○
12,000rpm	I-TROL	○
12,000rpm	HEIDENHAIN	○
Spindle Cooling System	8,000rpm	○
	Over 10,000rpm	●
ATC		
ATC Extension	30	●
	40	○
	BBT40	●
Tool Shank Type	HSK-A63 (12K, 15K)	○
	CAT40/BCV40	○
U-Center	D'andrea	○
Pull Stud	45°	●
Table & Column		
T-Slot Table		●
NCRotary Table		☆
High Column	200mm (7.9")	○
	300mm (11.8")	-
Coolant System		
Std. Coolant (Main Spindle Nozzle)		●
	20bar	○
Through Spindle Coolant	30bar, 20 ℓ	○
	70bar, 15 ℓ	○
	70bar, 30 ℓ	○
Top Cover		●
Shower Coolant		○
Gun Coolant		○
Bed Flushing Coolant		○
Air Gun		○
Cutting Air Blow		○
Tool Measuring Air Blow (Only for TLM)		●
Air Blow for Automation		☆
Thru MQL Device (Without MQL)		☆
Coolant Chiller (Sub Tank)		☆
Power Coolant System (For Automation)		☆
Chip Disposal		
Coolant Tank	340	●
Interior Screw Chip Conveyor		●
Upper Chip Conveyor (Hinge)	Left	○
	Right	○
Flood Chip Conveyor (Hinge/Scraper)	Left	○
	Right	○
	Rear	○
Screw Type Chip Conveyor	Left	☆
	Right	☆
Drum Filter Type	Left	☆
Chip Conveyor	Right	☆
	Rear	☆
	Standard(180 ℓ)	○
	Swing(200 ℓ)	○
Chip Wagon	Large Swing(290 ℓ)	○
	Large Size(330 ℓ)	○
	Customized	☆
*Special Option		
ATC Auto Shutter	30T/40T	○
ATC Full Cover	30T/40T/60T	○
*Fine Dust Protecting Package		
Table Around Cover	Wet Machining	○
Bellows Cover (X/Y)		○
Multi Cover (Z)	Dry Machining	○
Guide Way Double Wiper		○
ETC		
Tool Box		●
Customized Color	Need for Munsell No.	☆
CAD&CAM Software		☆

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Electric Device		KF4600 II
Call Light	1 Color : ●	●
Call Light & Buzzer	3 Color : ● ■ ■ B	○
Electric Cabinet Light		○
Remote MPG		●
3 Axis MPG		○
Work Counter	Digital	○
Total Counter	Digital	○
Tool Counter	Digital	○
Multi Tool Counter	Digital	○
Electric Circuit Breaker		○
AVR (Auto Voltage Regulator)		☆
Transformer	30kVA	○
	35kVA	-
Auto Power Off		○
Back up Module for Black out		○
Measuring Device		
Air Zero	TACO	○
	SMC	○
Work Measuring Device		○
TLM	Touch	○
(Marposs/Renishaw/Blum)	Laser	○
Tool Broken Detective Device		☆
Linear Scale	X/Y/Z Axis	○
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆
Environment		
Air Conditioner		○
Oil Mist Collector		☆
Oil Skimmer (Only for Chip Conveyor)		○
MQL (Minimal Quantity Lubrication)		☆
Fixture & Automation		
Auto Door	Std.	○
	High Speed	☆
Auto Shutter (Only for Automatic System)		○
Sub O/P		☆
NC Rotary Table/F	Single	○
	Channel	☆
	1Axis	○
Control of Additional Axis	2Axis	☆
External M Code 4ea		○
Automation Interface		☆
I/O Extension (In & Out)	16 Contact	○
	32 Contact	○
Hyd. Device		
	45bar	-
Hyd. Unit for Fixture	70bar	○
	100bar	○
	Customized	☆
S/W		
DNC software (HW-eDNC)		○
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆
Automation CAM program (HW-ACAM)		○
Conversational program (HW-DPRO)		○
SmartGuide-i		●
Tool Monitoring (HW-TM)		○
Adaptive Feed Control (HW-AFC)		●
Thermal Displacement Compensation (HW-TDC)		○
Machining Condition Selection (HW-MCS)		●
Machine Guidance (HW-MCG)		●
RENISHAW GJI		○
Spindle Warm up Function (HW-WARMUP)		●
Energy Saving System (HW-ESS)		●
Premium Tool Operation		●
Manual Viewer		●
Scheduling		●
Operation Memo		●

* Detailed options require consultation with HYUNDAI WIA.

Specifications are subject to change without notice for improvement.

SPECIFICATIONS

Standard & Optional

Spindle		KF5600 II	KF5600L II
8,000rpm	FANUC	●	
8,000rpm (High-torque)	FANUC	○	
10,000rpm	FANUC	○	
12,000rpm	FANUC	○	
15,000rpm	FANUC	○	
12,000rpm	I-TROL	○	
12,000rpm	HEIDENHAIN	○	
Spindle Cooling System	8,000rpm	○	
	Over 10,000rpm	●	
ATC			
ATC Extension	30	●	
	40	○	
	60	○	
Tool Shank Type	BBT40	●	
	HSK-A63 (12K, 15K)	○	
	CAT40/BCV40	○	
U-Center	D'andrea	○	
Pull Stud	45°	●	
Table & Column			
T-Slot Table		●	
NC Rotary Table		☆	
High Column	200mm (7.9")		
	300mm (11.8")	○	○ (60T : -)
Coolant System			
Std. Coolant (Main Spindle Nozzle)		●	
Through Spindle Coolant	20bar	○	
	30bar, 20 ℓ	○	
	70bar, 15 ℓ	○	
	70bar, 30 ℓ	○	
Top Cover		●	
Shower Coolant		○	
Gun Coolant		○	
Bed Flushing Coolant		○	
Air Gun		○	
Cutting Air Blow		○	
Tool Measuring Air Blow (Only for TLM)		●	
Air Blow for Automation		☆	
Thru MQL Device (Without MQL)		☆	
Coolant Chiller (Sub Tank)		☆	
Power Coolant System (For Automation)		☆	
Chip Disposal			
Coolant Tank	350 ℓ	●	-
	370 ℓ	-	●
Interior Screw Chip Conveyor		●	
Upper Chip Conveyor (Hinge)	Left	○	
	Right	○	
Flood Chip Conveyor (Hinge/Scraper)	Left	○	
	Right	○	
	Rear	○	
Screw Type Chip Conveyor	Left	☆	
	Right	☆	
Drum Filter Type Chip Conveyor	Left	☆	
	Right	☆	
	Rear	☆	
Chip Wagon	Standard(180 ℓ)	○	
	Swing(200 ℓ)	○	
	Large Swing(290 ℓ)	○	
	Large Size(330 ℓ)	○	
	Customized	☆	
*Special Option			
ATC Auto Shutter	30T/40T	○	-
ATC Full Cover	30T/40T/60T	○	-
*Fine Dust Protecting Package			
Table Around Cover	Wet Machining	○	-
Belows Cover (X/Y)		○	-
Multi Cover (Z)	Dry Machining	○	-
Guide Way Double Wiper		○	-
ETC			
Tool Box		●	
Customized Color	Need for Munsell No.	☆	
CAD&CAM Software		☆	

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Electric Device		KF5600 II	KF5600L II
Call Light	1 Color : ●	●	
Call Light & Buzzer	3 Color : ● ● ● B	○	
Electric Cabinet Light		○	
Remote MPG		●	
3 Axis MPG		○	
Work Counter	Digital	○	
Total Counter	Digital	○	
Tool Counter	Digital	○	
Multi Tool Counter	Digital	○	
Electric Circuit Breaker		○	
AVR (Auto Voltage Regulator)		☆	
Transformer	30kVA	○	
	35kVA	-	
Auto Power Off		○	
Back up Module for Black out		○	
Measuring Device			
Air Zero	TACO	○	
	SMC	○	
Work Measuring Device		○	
TLM (Marposs/Renishaw/Blum)	Touch	○	
	Laser	○	
Tool Broken Detective Device		☆	
Linear Scale	X/Y/Z Axis	○	
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆	
Environment			
Air Conditioner		○	
Oil Mist Collector		☆	
Oil Skimmer (Only for Chip Conveyor)		○	
MQL (Minimal Quantity Lubrication)		☆	
Fixture & Automation			
Auto Door	Std.	○	
	High Speed	☆	
Auto Shutter (Only for Automatic System)		○	
Sub O/P		☆	
NC Rotary Table/F	Single	○	
	Channel	☆	
Control of Additional Axis	1Axis	○	
	2Axis	☆	
External M Code 4ea		○	
Automation Interface		☆	
I/O Extension (In & Out)	16 Contact	○	
	32 Contact	○	
Hyd. Device			
Hyd. Unit for Fixture	45bar	-	
	70bar	○	
	100bar	○	
	Customized	☆	
S/W			
DNC software (HW-eDNC)		○	
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○	
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆	
Automation CAM program (HW-ACAM)		○	
Conversational program (HW-DPRO)		○	
SmartGuide-i		●	
Tool Monitoring (HW-TM)		○	
Adaptive Feed Control (HW-AFC)		●	
Thermal Displacement Compensation (HW-TDC)		○	
Machining Condition Selection (HW-MCS)		●	
Machine Guidance (HW-MCG)		●	
RENISHAW GUI		○	
Spindle Warm up Function (HW-WARMUP)		●	
Energy Saving System (HW-ESS)		●	
Premium Tool Operation		●	
Manual Viewer		●	
Scheduling		●	
Operation Memo		●	

* Detailed options require consultation with HYUNDAI WIA.

Specifications are subject to change without notice for improvement.

SPECIFICATIONS

Standard & Optional

Spindle		KF6700 II
8,000rpm	FANUC	●
8,000rpm (High-torque)	FANUC	○
10,000rpm	FANUC	○
12,000rpm	FANUC	○
15,000rpm	FANUC	○
12,000rpm	I-TROL	○
12,000rpm	HEIDENHAIN	○
Spindle Cooling System	8,000rpm	○
	Over 10,000rpm	●
ATC		
ATC Extension	30	●
	40	○
	60	○
Tool Shank Type	BBT40	●
	HSK-A63 (12K, 15K)	○
	CAT40/BCV40	○
U-Center	D'andrea	○
Pull Stud	45°	●
Table & Column		
T-Slot Table		●
NCRotary Table		☆
High Column	200mm (7.9")	-
	300mm (11.8")	○
Coolant System		
Std. Coolant (Main Spindle Nozzle)		●
Through Spindle Coolant	20bar	○
	30bar, 20 ℓ	○
	70bar, 15 ℓ	○
	70bar, 30 ℓ	○
Top Cover		●
Shower Coolant		○
Gun Coolant		○
Bed Flushing Coolant		○
Air Gun		○
Cutting Air Blow		○
Tool Measuring Air Blow (Only for TLM)		●
Air Blow for Automation		☆
Thru MQL Device (Without MQL)		☆
Coolant Chiller (Sub Tank)		☆
Power Coolant System (For Automation)		☆
Chip Disposal		
Coolant Tank	370 ℓ	●
Interior Screw Chip Conveyor		●
Upper Chip Conveyor (Hinge)	Left	○
	Right	○
Flood Chip Conveyor (Hinge/Scraper)	Left	○
	Right	○
	Rear	○
Screw Type Chip Conveyor	Left	☆
	Right	☆
Drum Filter Type Chip Conveyor	Left	☆
	Right	☆
Chip Wagon	Rear	☆
	Standard(180 ℓ)	○
	Swing(200 ℓ)	○
	Large Swing(290 ℓ)	○
	Large Size(330 ℓ)	○
Customized		☆
*Special Option		
ATC Auto Shutter	30T/40T	○
ATC Full Cover	30T/40T/60T	○
*Fine Dust Protecting Package		
Table Around Cover	Wet Machining	○
Bellows Cover (X/Y)		○
Multi Cover (Z)	Dry Machining	○
Guide Way Double Wiper		○
ETC		
Tool Box		●
Customized Color	Need for Munsel No.	☆
CAD&CAM Software		☆

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Electric Device		KF6700 II
Call Light	1 Color : ●	●
Call Light & Buzzer	3 Color : ● ● ● B	○
Electric Cabinet Light		○
Remote MPG		●
3 Axis MPG		○
Work Counter	Digital	○
Total Counter	Digital	○
Tool Counter	Digital	○
Multi Tool Counter	Digital	○
Electric Circuit Breaker		○
AVR (Auto Voltage Regulator)		☆
Transformer	30kVA	○
	35kVA	-
Auto Power Off		○
Back up Module for Black out		○
Measuring Device		
Air Zero	TACO	○
	SMC	○
Work Measuring Device		○
TLM (Marposs/Renishaw/Blum)	Touch	○
	Laser	○
Tool Broken Detective Device		☆
Linear Scale	X/Y/Z Axis	○
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆
Environment		
Air Conditioner		○
Oil Mist Collector		☆
Oil Skimmer (Only for Chip Conveyor)		○
MQL (Minimal Quantity Lubrication)		☆
Fixture & Automation		
Auto Door	Std.	○
	High Speed	☆
Auto Shutter (Only for Automatic System)		○
Sub O/P		☆
NC Rotary Table/F	Single	○
	Channel	☆
Control of Additional Axis	1Axis	○
	2Axis	☆
External M Code 4ea		○
Automation Interface		☆
I/O Extension (In & Out)	16 Contact	○
	32 Contact	○
Hyd. Device		
Hyd. Unit for Fixture	45bar	-
	70bar	○
	100bar	○
	Customized	☆
S/W		
DNC software (HW-eDNC)		○
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆
Automation CAM program (HW-ACAM)		○
Conversational program (HW-DPRO)		○
SmartGuide-i		●
Tool Monitoring (HW-TM)		○
Adaptive Feed Control (HW-AFC)		●
Thermal Displacement Compensation (HW-TDC)		○
Machining Condition Selection (HW-MCS)		●
Machine Guidance (HW-MCG)		●
RENISHAW GUI		○
Spindle Warm up Function (HW-WARMUP)		●
Energy Saving System (HW-ESS)		●
Premium Tool Operation		●
Manual Viewer		●
Scheduling		●
Operation Memo		●

* Detailed options require consultation with HYUNDAI WIA.

Specifications are subject to change without notice for improvement.

SPECIFICATIONS

Standard & Optional

● : Standard ○ : Option ☆ : Prior Consultation - : Non Applicable

Spindle		KF5600/50 II	KF6700/50 II
8,000rpm		●	
Spindle Cooling System		●	
ATC			
ATC Extension	24	●	
	30	-	○
Tool Shank Type	BBT50	●	
	HSK-A100	○	
	CAT50/BCV50	○	
U-Center	D'andrea	○	
Pull Stud	45°	●	
Table & Column			
T-Slot Table		●	
NCRotary Table		☆	
High Column	300mm	○	
쿨러트장치			
Std. Coolant (Main Spindle Nozzle)		●	
Through Spindle Coolant	20bar	○	
	30bar, 20 ℓ	○	
	70bar, 15 ℓ	○	
	70bar, 30 ℓ	○	
Top Cover		●	
Shower Coolant		○	
Gun Coolant		○	
Bed Flushing Coolant		○	
Air Gun		○	
Cutting Air Blow		○	
Tool Measuring Air Blow (Only for TLM)		○	
Air Blow for Automation		☆	
Thru MQL Device (Without MQL)		☆	
Coolant Chiller (Sub Tank)		☆	
Power Coolant System (For Automation)		☆	
Chip Disposal			
Coolant Tank	350 ℓ	●	-
	370 ℓ	-	●
Interior Screw Chip Conveyor		●	
Upper Chip Conveyor (Hinge)	Left	○	
	Right	○	
Flood Chip Conveyor (Hinge/Scraper)	Left	-	
	Right	-	
	Rear	-	
Screw Type Chip Conveyor	Left	☆	
	Right	☆	
Drum Filter Type Chip Conveyor	Left	☆	
	Right	☆	
	Rear	☆	
Chip Wagon	Standard(180 ℓ)	○	
	Swing(200 ℓ)	○	
	Large Swing(290 ℓ)	○	
	Large Size(330 ℓ)	○	
	Customized	☆	
ETC			
Tool Box		●	
Customized Color	Need for Munsel No.	☆	
CAD&CAM Software		☆	

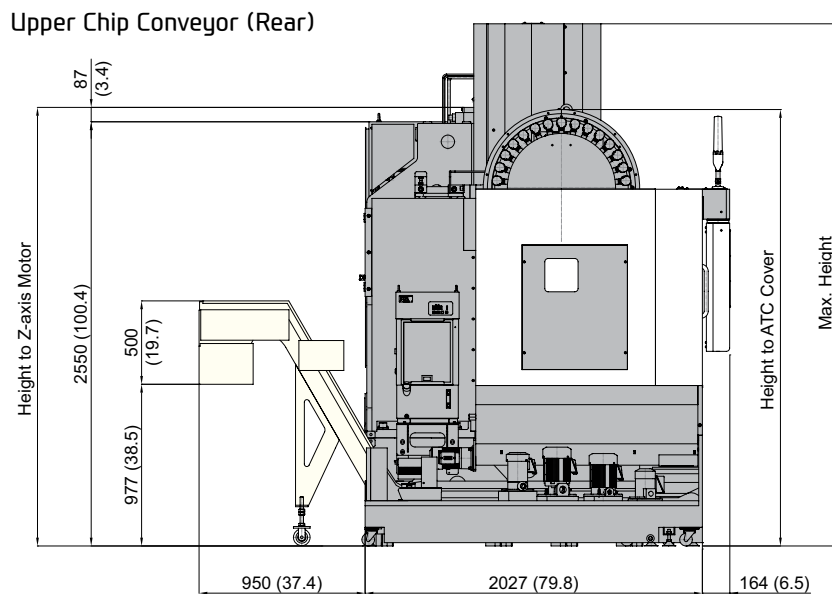
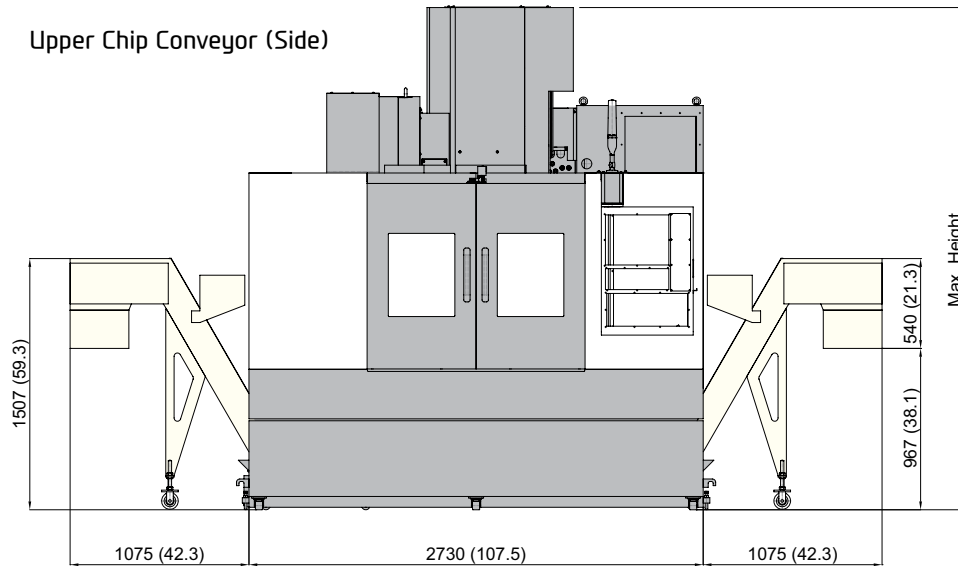
Electric Device		KF5600/50 II	KF6700/50 II
Call Light	1 Color : ●	●	
Call Light & Buzzer	3 Color : ● ● ● B	○	
Electric Cabinet Light		○	
Remote MPG		●	
3 Axis MPG		○	
Work Counter	Digital	○	
Total Counter	Digital	○	
Tool Counter	Digital	○	
Multi Tool Counter	Digital	☆	
Electric Circuit Breaker		○	
AVR (Auto Voltage Regulator)		☆	
Transformer	30kVA	-	
	35kVA	○	
Auto Power Off		○	
Back up Module for Black out		○	
Measuring Device			
Air Zero	TACO	☆	
	SMC	☆	
Work Measuring Device		○	
TLM (Marposs/Renishaw/Blum)	Touch	○	
	Laser	○	
Tool Broken Detective Device		○	
Linear Scale	X/Y/Z Axis	○	
Coolant Level Sensor (Only for Chip Conveyor, Bladder Type)		☆	
Environment			
Air Conditioner		○	
Oil Mist Collector		☆	
Oil Skimmer (Only for Chip Conveyor)		○	
MQL (Minimal Quantity Lubrication)		☆	
Fixture & Automation			
Auto Door	Std.	○	
	High Speed	☆	
Auto Shutter (Only for Automatic System)		○	
Sub O/P		☆	
NC Rotary Table/F	Single	☆	
	Channel	☆	
Control of Additional Axis	1Axis	○	
	2Axis	☆	
External M Code 4ea		○	
Automation Interface		☆	
I/O Extension (In & Out)	16 Contact	☆	
	32 Contact	☆	
Hyd. Device			
Hyd. Unit for Fixture	45bar	-	
	70bar	○	
	100bar	○	
	Customized	☆	
S/W			
DNC software (HW-eDNC)		○	
Machine Monitoring System (HW-MMS Cloud/Edge/Remote)		○	
Machine Monitoring System & Analysis (HW-MMS Edge Plus)		☆	
Automation CAM program (HW-ACAM)		○	
Conversational program (HW-DPRO)		○	
SmartGuide-i		●	
Tool Monitoring (HW-TM)		○	
Adaptive Feed Control (HW-AFC)		●	
Thermal Displacement Compensation (HW-TDC)		○	
Machining Condition Selection (HW-MCS)		●	
Machine Guidance (HW-MCG)		●	
RENISHAW GUI		○	
Spindle Warm up Function (HW-WARMUP)		●	
Energy Saving System (HW-ESS)		●	
Premium Tool Operation		●	
Manual Viewer		●	
Scheduling		●	
Operation Memo		●	

SPECIFICATIONS

External Dimensions

unit : mm(in)

KF4600 II



*Level Block Height : Upper Chip Conveyor (Side) _80mm (3.1"), Upper Chip Conveyor (Rear) _200mm (7.9")

ITEM	Max. Height		30T ATC Cover		40T ATC Cover		Z-axis Motor	
	Std.	H/Column	Std.	H/Column	Std.	H/Column	Std.	H/Column
Upper/Side	3,028 (119.2")	3,228 (127.1")	2,510 (98.8")	2,710 (106.7")	2,710 (106.7")	2,910 (114.6")	2,740 (107.9")	2,940 (115.7")
Upper/Rear	3,148 (123.9")	3,348 (131.8")	2,630 (103.5")	2,830 (111.4")	2,830 (111.4")	3,030 (119.3")	2,860 (112.6")	3,060 (120.5")

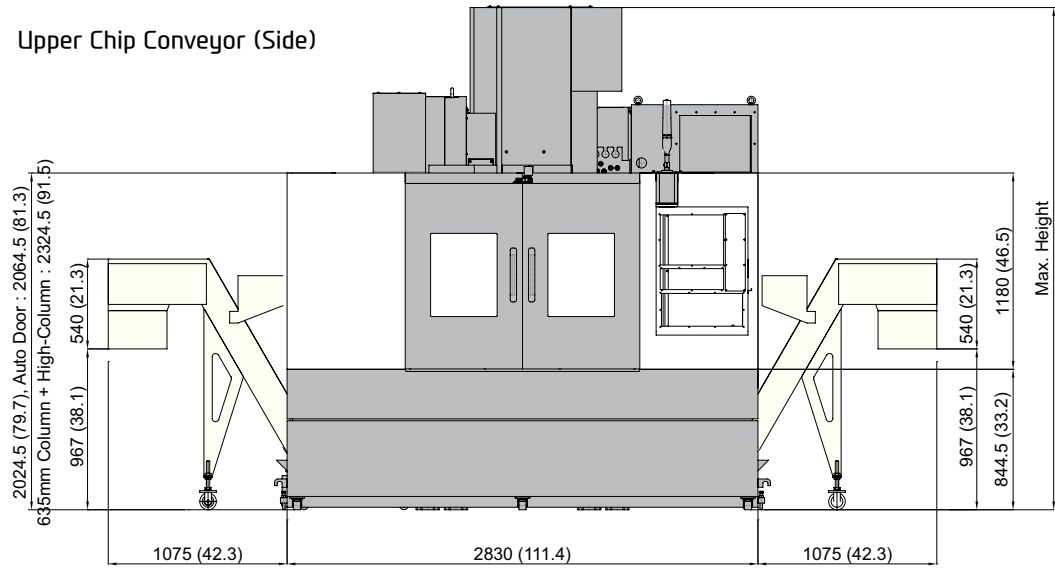
SPECIFICATIONS

External Dimensions

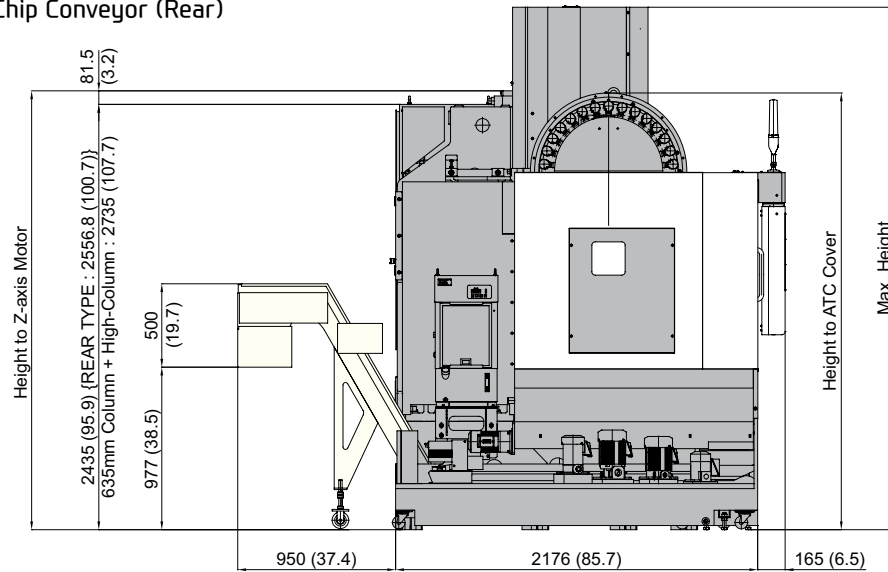
unit : mm(in)

KF5600 II

Upper Chip Conveyor (Side)



Upper Chip Conveyor (Rear)



*Level Block Height : Upper Chip Conveyor (Side)_80mm (3.1"), Upper Chip Conveyor (Rear)_200mm (7.9")

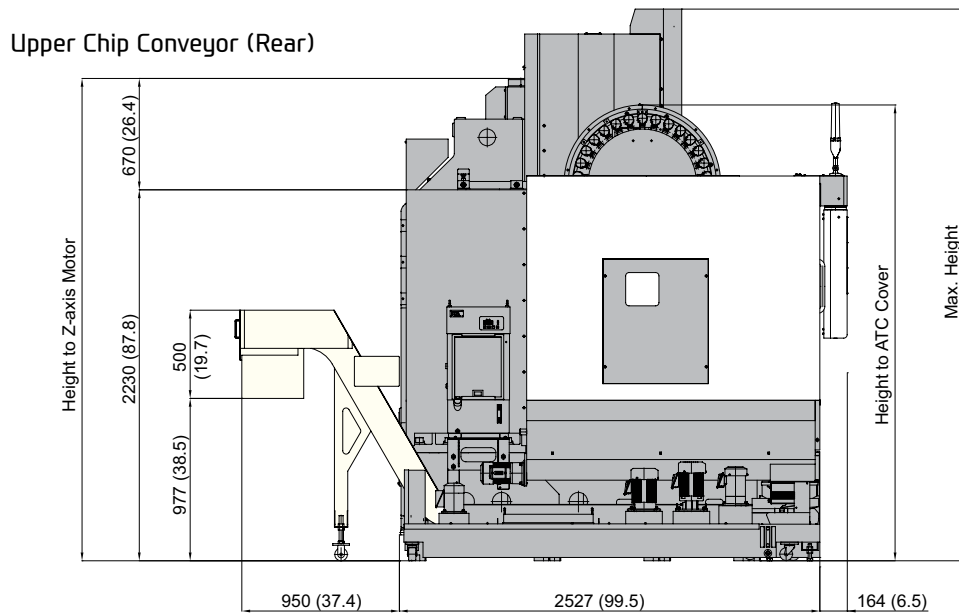
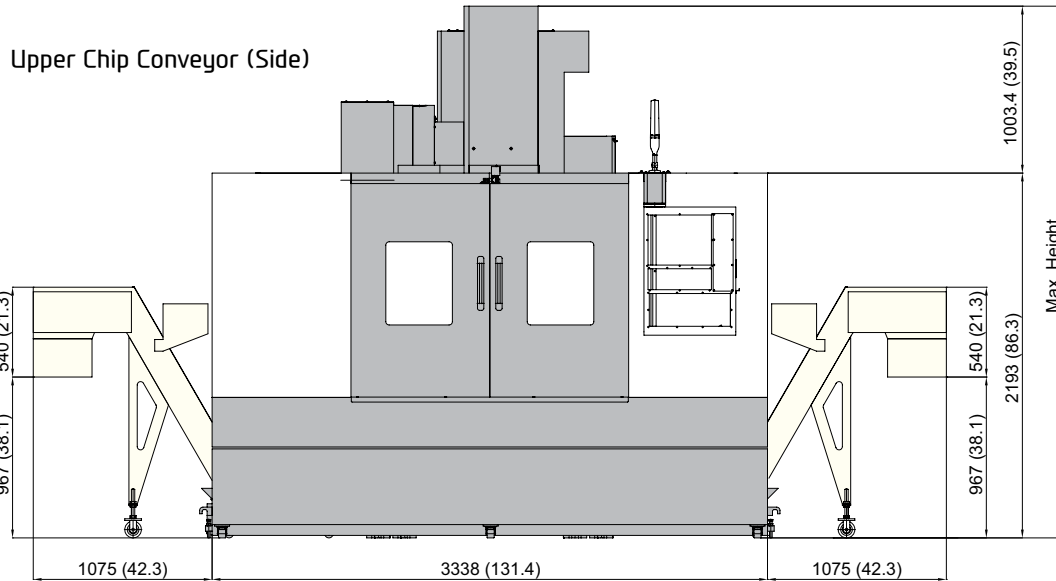
ITEM	Max. Height		30T ATC Cover			40T ATC Cover			60T ATC Cover			Z-axis Motor		
	Std.	H/C	Std.	635mm /C	H/C	Std.	635mm /C	H/C	Std.	635mm /C	H/C	Std.	635mm /C	H/C
Upper/ Side	3,028 (119.2")	3,443 (135.6")	2,510 (98.8")	2,627 (103.4")	2,926 (115.2")	2,710 (106.7")	2,828 (111.3")	3,126 (123.1")	2,380 (93.7")	2,495 (98.2")	2,680 (105.5")	2,740 (107.9")	2,855 (112.4")	3,155 (124.2")
Upper/ Rear	3,148 (123.9")	3,563 (140.3")	2,630 (103.5")	2,748 (108.2")	3,046 (119.9")	2,830 (111.4")	2,948 (116.1")	3,246 (127.8")	2,500 (98.4")	2,615 (103")	2,800 (110.2")	2,860 (112.6")	2,975 (117.1")	3,275 (128.9")

SPECIFICATIONS

External Dimensions

unit : mm(in)

KF6700 II



*Level Block Height : Upper Chip Conveyor (Side)_80mm (3.1"), Upper Chip Conveyor (Rear)_200mm (7.9")

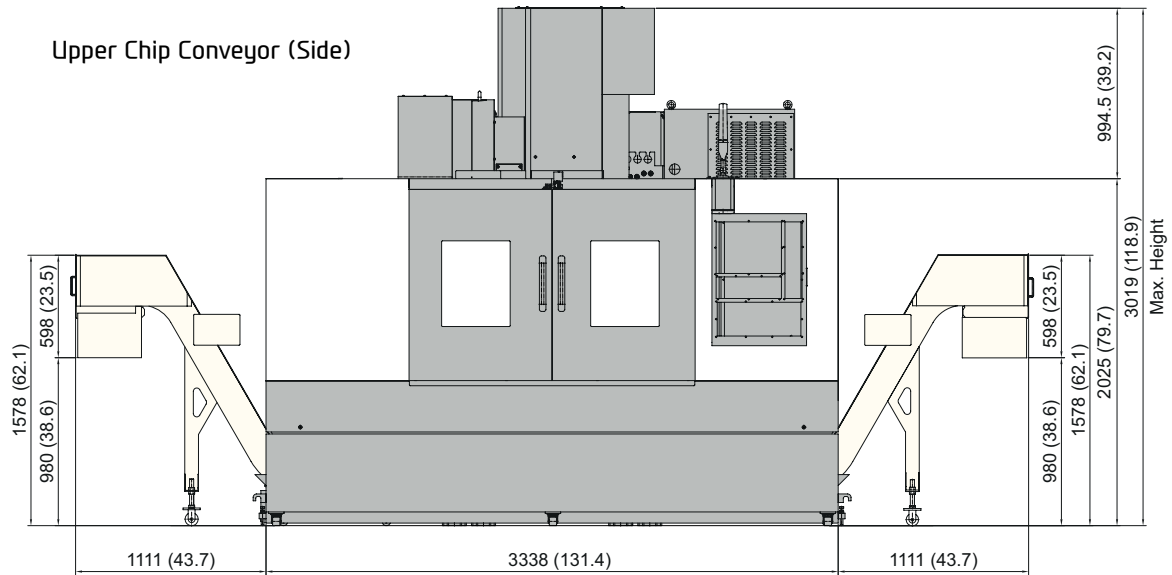
ITEM	Max. Height		30T ATC Cover		40T ATC Cover		60T ATC Cover		Z-axis Motor	
	Std.	H/Column	Std.	H/Column	Std.	H/Column	Std.	H/Column	Std.	H/Column
Upper/ Side	3,196 (125.8")	3,496 (137.6")	2,620 (103.1")	2,920 (115")	2,820 (111")	3,120 (122.8")	2,380 (93.7")	2,680 (105.5")	2,780 (109.4")	3,080 (121.3")
Upper/ Rear	3,316 (130.6")	3,616 (142.4")	2,740 (107.9")	3,040 (119.7")	2,940 (115.7")	3,240 (127.6")	2,500 (98.4")	2,800 (110.2")	2,900 (114.2")	3,200 (126")

SPECIFICATIONS

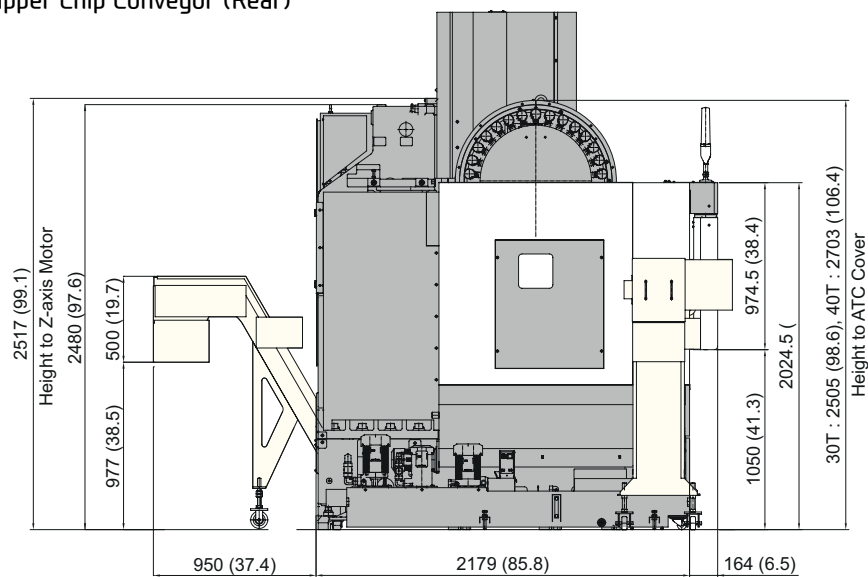
External Dimensions

unit : mm(in)

KF5600L II



Upper Chip Conveyor (Rear)



*Level Block Height : Upper Chip Conveyor (Side) _80mm (3.1"), Upper Chip Conveyor (Rear) _200mm (7.9")

ITEM	Max. Height		30T ATC Cover		40T ATC Cover		Z-axis Motor	
	Std.	H/Column	Std.	H/Column	Std.	H/Column	Std.	H/Column
Upper/ Side	3,019 (118.9)	-	2,505 (98.6)	-	2,703 (106.4)	-	2,517 (99.1)	-
Upper/ Rear	3,139 (123.6)	-	2,625 (103.3)	-	2,823 (111.1)	-	2,637 (103.8)	-

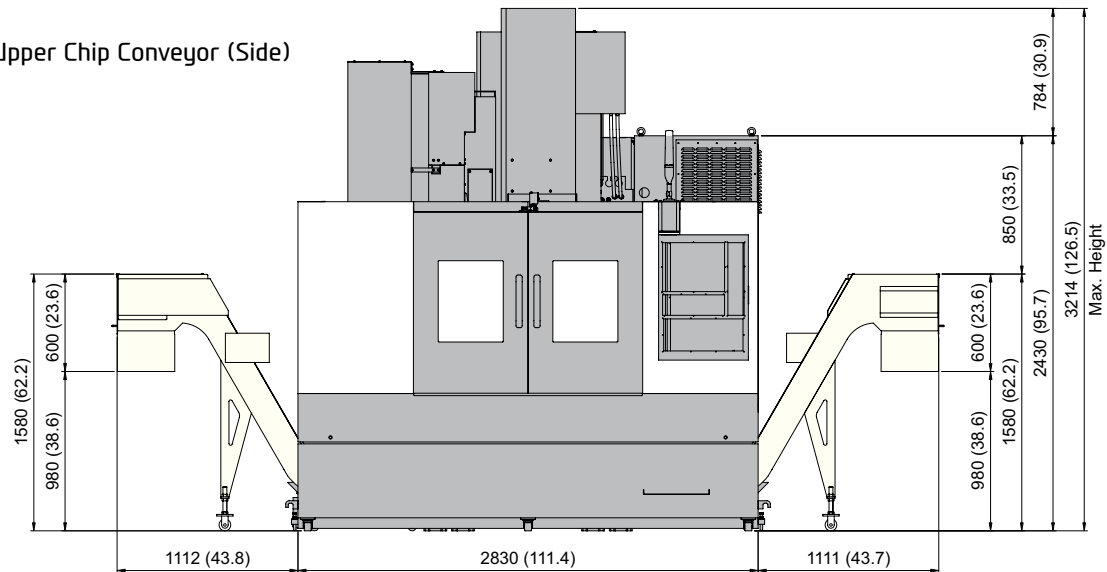
SPECIFICATIONS

External Dimensions

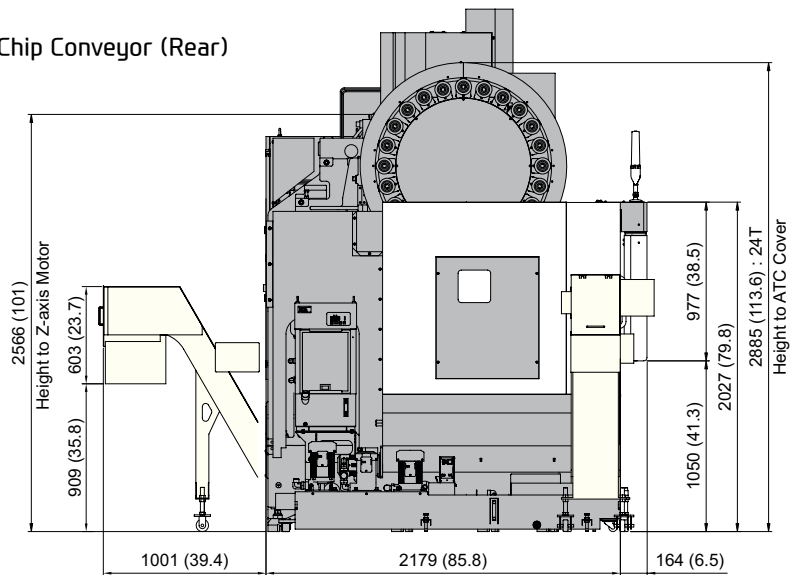
unit : mm(in)

KF5600/50 II

Upper Chip Conveyor (Side)



Upper Chip Conveyor (Rear)



*Level Block Height : Upper Chip Conveyor (Side) _80mm (3.1"), Upper Chip Conveyor (Rear) _200mm (7.9")

ITEM	Max. Height		24T ATC Cover			Z-axis Motor		
	Std.	H/Column	Std.	635mm/C	H/Column	Std.	635mm/C	H/Column
Upper/ Side	3,214 (126.5)	3,629 (142.9)	2,885 (113.6)	3,003 (118.2)	3,301 (130)	2,566 (101)	2,711 (106.7)	2,981 (117.4)
Upper/ Rear	3,334 (131.3)	3,749 (147.6)	3,005 (118.3)	3,123 (123)	3,421 (134.7)	2,686 (105.7)	2,831 (111.5)	3,101 (122.1)

HYUNDAI WIA
MACHINE TOOL

unit : mm(in)

KF-II Series
Vertical Machining Center



ITEM	Max. Height		24T ATC Cover		24T ATC Cover		Z-axis Motor	
	Std.	H/Column	Std.	H/Column	Std.	H/Column	Std.	H/Column
Upper/ Side	3,323 (130.8)	3,623 (142.6)	2,999 (118.1)	3,299 (129.9)	2,605 (102.6)	2,905 (114.4)	2,682 (105.6)	2,982 (117.4)
Upper/ Rear	3,443 (135.6)	3,743 (147.4)	3,119 (122.8)	3,419 (134.6)	2,725 (107.3)	3,025 (119.1)	2,802 (110.3)	3,102 (122.1)

Tool Shank

unit : mm(in)

Technical drawing of a 16mm Borehole Drill Bit (Type 1). The drawing includes a side view and an end view. The side view shows the drill bit with a 60° cutting edge, a 7/24 taper, and a 45° transition. Dimensions are provided in millimeters (mm) and inches ("). The end view shows the circular profile of the drill bit with a central hole.

Side View Dimensions:

- Overall length: 10 (0.39)
- Length of first section: 1 (0.04) (BBT40, BIG PLUS)
- Length of second section: 16.6 (0.65)
- Length of third section: 27 (1.06)
- Length of fourth section: 65.4 (2.57)
- Length of fifth section: 6 (0.24)
- Length of sixth section: 29 (1.14)
- Length of seventh section: 35 (1.38)
- Length of eighth section: 2 (0.08) (BT40)
- Length of ninth section: 2 (0.08)
- Length of tenth section: 2 (0.08)
- Length of eleventh section: 2 (0.08)
- Length of twelfth section: 2 (0.08)
- Length of thirteenth section: 2 (0.08)
- Length of fourteenth section: 2 (0.08)
- Length of fifteenth section: 2 (0.08)
- Length of sixteenth section: 2 (0.08)
- Length of seventeenth section: 2 (0.08)
- Length of eighteenth section: 2 (0.08)
- Length of nineteenth section: 2 (0.08)
- Length of twentieth section: 2 (0.08)
- Length of twenty-first section: 2 (0.08)
- Length of twenty-second section: 2 (0.08)
- Length of twenty-third section: 2 (0.08)
- Length of twenty-fourth section: 2 (0.08)
- Length of twenty-fifth section: 2 (0.08)
- Length of twenty-sixth section: 2 (0.08)
- Length of twenty-seventh section: 2 (0.08)
- Length of twenty-eighth section: 2 (0.08)
- Length of twenty-ninth section: 2 (0.08)
- Length of thirtieth section: 2 (0.08)
- Length of thirty-first section: 2 (0.08)
- Length of thirty-second section: 2 (0.08)
- Length of thirty-third section: 2 (0.08)
- Length of thirty-fourth section: 2 (0.08)
- Length of thirty-fifth section: 2 (0.08)
- Length of thirty-sixth section: 2 (0.08)
- Length of thirty-seventh section: 2 (0.08)
- Length of thirty-eighth section: 2 (0.08)
- Length of thirty-ninth section: 2 (0.08)
- Length of fortieth section: 2 (0.08)
- Length of forty-first section: 2 (0.08)
- Length of forty-second section: 2 (0.08)
- Length of forty-third section: 2 (0.08)
- Length of forty-fourth section: 2 (0.08)
- Length of forty-fifth section: 2 (0.08)
- Length of forty-sixth section: 2 (0.08)
- Length of forty-seventh section: 2 (0.08)
- Length of forty-eighth section: 2 (0.08)
- Length of forty-ninth section: 2 (0.08)
- Length of fiftieth section: 2 (0.08)
- Length of fifty-first section: 2 (0.08)
- Length of fifty-second section: 2 (0.08)
- Length of fifty-third section: 2 (0.08)
- Length of fifty-fourth section: 2 (0.08)
- Length of fifty-fifth section: 2 (0.08)
- Length of fifty-sixth section: 2 (0.08)
- Length of fifty-seventh section: 2 (0.08)
- Length of fifty-eighth section: 2 (0.08)
- Length of fifty-ninth section: 2 (0.08)
- Length of sixtieth section: 2 (0.08)
- Length of sixty-first section: 2 (0.08)
- Length of sixty-second section: 2 (0.08)
- Length of sixty-third section: 2 (0.08)
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- Length of seventy-sixth section: 2 (0.08)
- Length of seventy-seventh section: 2 (0.08)
- Length of seventy-eighth section: 2 (0.08)
- Length of seventy-ninth section: 2 (0.08)
- Length of eightieth section: 2 (0.08)
- Length of eighty-first section: 2 (0.08)
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- Length of eighty-third section: 2 (0.08)
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- Length of eighty-fifth section: 2 (0.08)
- Length of eighty-sixth section: 2 (0.08)
- Length of eighty-seventh section: 2 (0.08)
- Length of eighty-eighth section: 2 (0.08)
- Length of eighty-ninth section: 2 (0.08)
- Length of ninetieth section: 2 (0.08)
- Length of ninety-first section: 2 (0.08)
- Length of ninety-second section: 2 (0.08)
- Length of ninety-third section: 2 (0.08)
- Length of ninety-fourth section: 2 (0.08)
- Length of ninety-fifth section: 2 (0.08)
- Length of ninety-sixth section: 2 (0.08)
- Length of ninety-seventh section: 2 (0.08)
- Length of ninety-eighth section: 2 (0.08)
- Length of ninety-ninth section: 2 (0.08)
- Length of one hundred section: 2 (0.08)

End View Dimensions:

- Overall diameter: 22.6 (0.88)
- Length of first section: 16.1 (0.63)
- Length of second section: 16.1 (0.63)
- Length of third section: 16.1 (0.63)
- Length of fourth section: 16.1 (0.63)
- Length of fifth section: 16.1 (0.63)
- Length of sixth section: 16.1 (0.63)
- Length of seventh section: 16.1 (0.63)
- Length of eighth section: 16.1 (0.63)
- Length of ninth section: 16.1 (0.63)
- Length of tenth section: 16.1 (0.63)
- Length of eleventh section: 16.1 (0.63)
- Length of twelfth section: 16.1 (0.63)
- Length of thirteenth section: 16.1 (0.63)
- Length of fourteenth section: 16.1 (0.63)
- Length of fifteenth section: 16.1 (0.63)
- Length of sixteenth section: 16.1 (0.63)
- Length of seventeenth section: 16.1 (0.63)
- Length of eighteenth section: 16.1 (0.63)
- Length of nineteenth section: 16.1 (0.63)
- Length of twentieth section: 16.1 (0.63)
- Length of twenty-first section: 16.1 (0.63)
- Length of twenty-second section: 16.1 (0.63)
- Length of twenty-third section: 16.1 (0.63)
- Length of twenty-fourth section: 16.1 (0.63)
- Length of twenty-fifth section: 16.1 (0.63)
- Length of twenty-sixth section: 16.1 (0.63)
- Length of twenty-seventh section: 16.1 (0.63)
- Length of twenty-eighth section: 16.1 (0.63)
- Length of twenty-ninth section: 16.1 (0.63)
- Length of thirtieth section: 16.1 (0.63)
- Length of thirty-first section: 16.1 (0.63)
- Length of thirty-second section: 16.1 (0.63)
- Length of thirty-third section: 16.1 (0.63)
- Length of thirty-fourth section: 16.1 (0.63)
- Length of thirty-fifth section: 16.1 (0.63)
- Length of thirty-sixth section: 16.1 (0.63)
- Length of thirty-seventh section: 16.1 (0.63)
- Length of thirty-eighth section: 16.1 (0.63)
- Length of thirty-ninth section: 16.1 (0.63)
- Length of fortieth section: 16.1 (0.63)
- Length of forty-first section: 16.1 (0.63)
- Length of forty-second section: 16.1 (0.63)
- Length of forty-third section: 16.1 (0.63)
- Length of forty-fourth section: 16.1 (0.63)
- Length of forty-fifth section: 16.1 (0.63)
- Length of forty-sixth section: 16.1 (0.63)
- Length of forty-seventh section: 16.1 (0.63)
- Length of forty-eighth section: 16.1 (0.63)
- Length of forty-ninth section: 16.1 (0.63)
- Length of fiftieth section: 16.1 (0.63)
- Length of fifty-first section: 16.1 (0.63)
- Length of fifty-second section: 16.1 (0.63)
- Length of fifty-third section: 16.1 (0.63)
- Length of fifty-fourth section: 16.1 (0.63)
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- Length of fifty-sixth section: 16.1 (0.63)
- Length of fifty-seventh section: 16.1 (0.63)
- Length of fifty-eighth section: 16.1 (0.63)
- Length of fifty-ninth section: 16.1 (0.63)
- Length of sixtieth section: 16.1 (0.63)
- Length of sixty-first section: 16.1 (0.63)
- Length of sixty-second section: 16.1 (0.63)
- Length of sixty-third section: 16.1 (0.63)
- Length of sixty-fourth section: 16.1 (0.63)
- Length of sixty-fifth section: 16.1 (0.63)
- Length of sixty-sixth section: 16.1 (0.63)
- Length of sixty-seventh section: 16.1 (0.63)
- Length of sixty-eighth section: 16.1 (0.63)
- Length of sixty-ninth section: 16.1 (0.63)
- Length of seventieth section: 16.1 (0.63)
- Length of seventy-first section: 16.1 (0.63)
- Length of seventy-second section: 16.1 (0.63)
- Length of seventy-third section: 16.1 (0.63)
- Length of seventy-fourth section: 16.1 (0.63)
- Length of seventy-fifth section: 16.1 (0.63)
- Length of seventy-sixth section: 16.1 (0.63)
- Length of seventy-seventh section: 16.1 (0.63)
- Length of seventy-eighth section: 16.1 (0.63)
- Length of seventy-ninth section: 16.1 (0.63)
- Length of eightieth section: 16.1 (0.63)
- Length of eighty-first section: 16.1 (0.63)
- Length of eighty-second section: 16.1 (0.63)
- Length of eighty-third section: 16.1 (0.63)
- Length of eighty-fourth section: 16.1 (0.63)
- Length of eighty-fifth section: 16.1 (0.63)
- Length of eighty-sixth section: 16.1 (0.63)

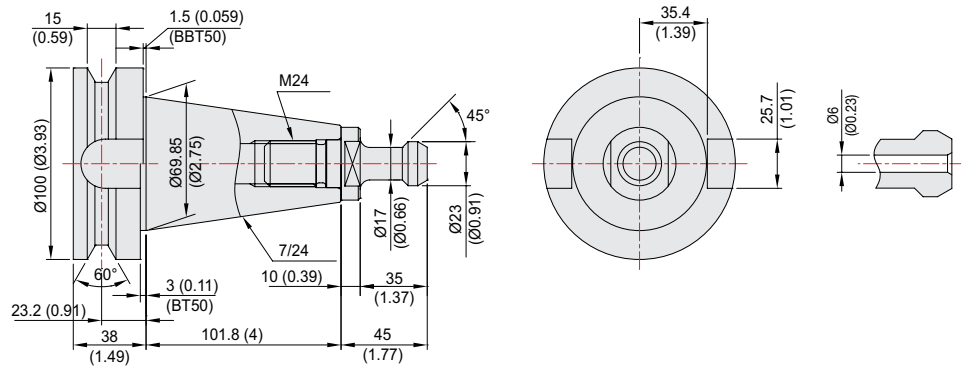


SPECIFICATIONS

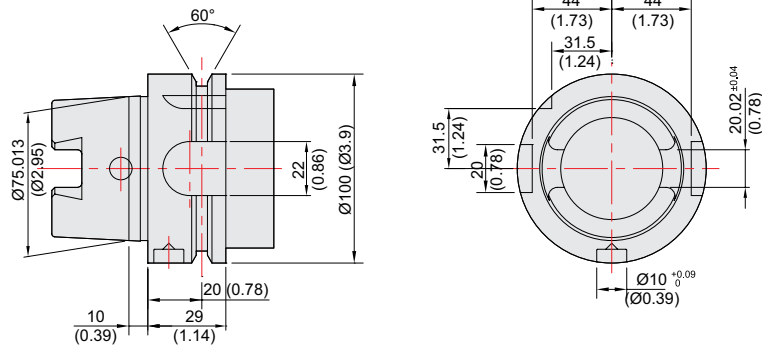
Tool Shank

unit : mm(in)

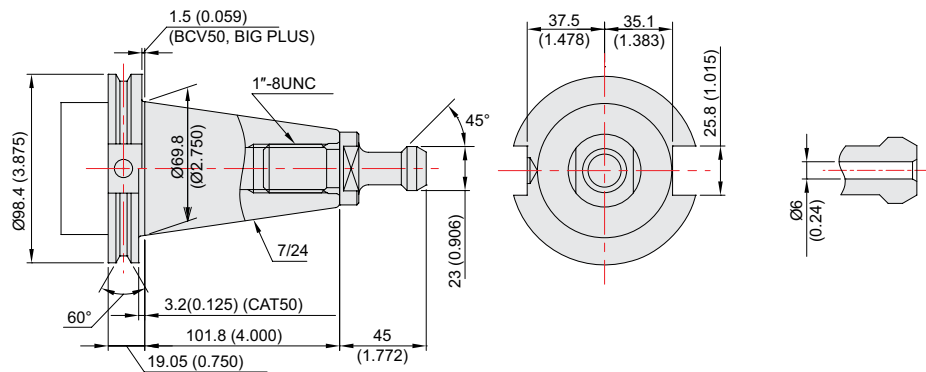
BT50/BBT50, BIG PLUS



HSK A-100



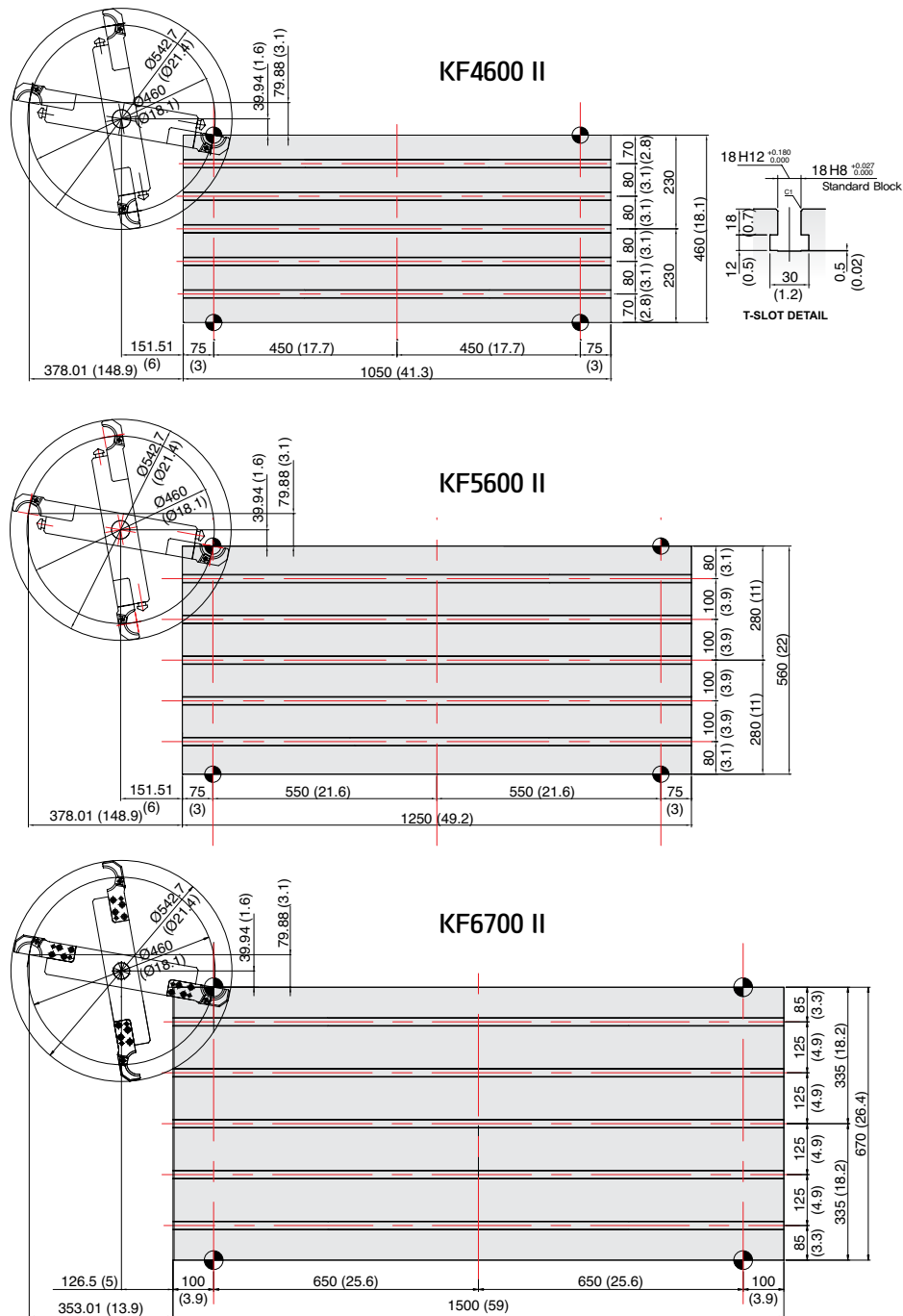
CAT50/BCV50



SPECIFICATIONS

Table Dimensions

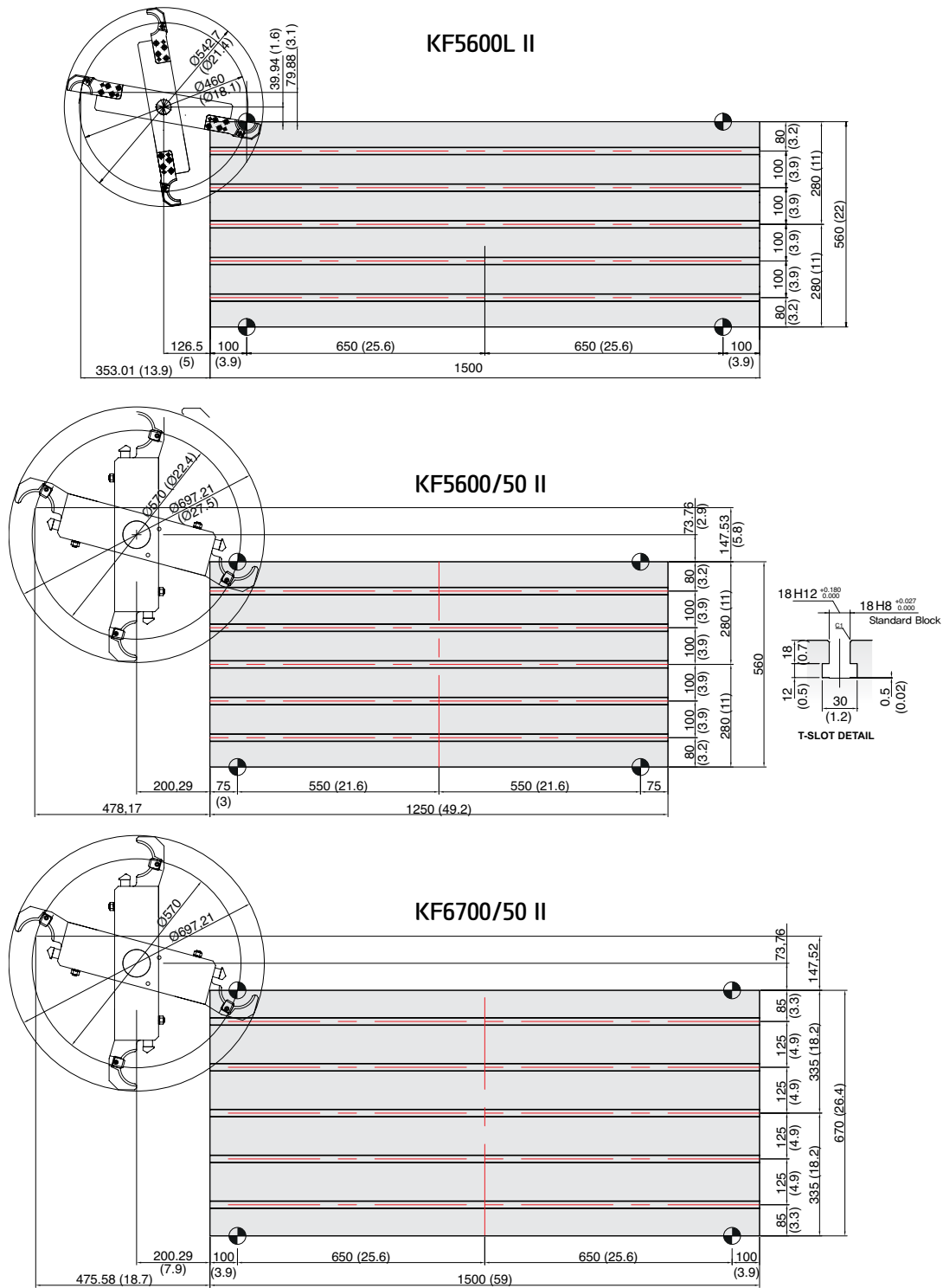
unit : mm(in)



SPECIFICATIONS

Table Dimensions

unit : mm(in)



SPECIFICATIONS

Specifications

[] : Option

ITEM			KF4600 II
TABLE	Table Size (L×W)	mm(in)	1,050×460 (41.3"×18.1")
	Maximum Load Capacity	kg(lb)	600 (1,323)
FEED	Travel (X/Y/Z)	mm(in)	900/460/520 (35.4"/18.1"/20.5")
	Rapid Traverse Rate (X/Y/Z)	m/min	36/36/30
	Distance from Table Top to SP. Nose	mm(in)	150 ~ 670 [870] (5.9" ~ 26.4" [34.3"])
	Distance from Column to SP. center	mm(in)	585 (23")
	Slide Type	-	ROLLER TYPE LM GUIDE
ATC	Number of Tools	ea	30 [40]
	Tool Shank	-	BBT40 [12K, 15K : HSK-A63]
	Max. Tool Dia. (W.T / W.O)	mm(in)	30T : Ø80 [40T : Ø76]/Ø125 (30T : Ø3.1" [40T : Ø3"]/Ø4.9")
	Max. Tool Length	mm(in)	300 (11.8")
	Max. Tool Weight	kg(lb)	8 (17.6)
	Tool Selection Method	-	RANDOM [FIXED]
	Tool Change Time	T-T sec	1.3
		C-C sec	3.2
TANK CAPACITY	Coolant Tank	ℓ (gal)	340 (89.8)
	Lubricating Tank	ℓ (gal)	4 (1)
	Hydraulic Tank	ℓ (gal)	- (BOOSTER CYLINDER)
POWER SUPPLY	Air Consumption (0.5MPa)	ℓ /min(gal)	110 (29)
	Electric Power Supply	KVA	26
	Thickness of Power Cable	Sq	Over 25
	Voltage	V/Hz	220/60 (200/50)
MACHINE	Floor Space (L×W)	mm(in)	2,730×2,027 (107.5"×79.8")
	Height	mm(in)	3,028 (119.2")
	Weight	kg(lb)	5,500 (12,125)

Spindle

[] : Option

ITEM	Speed r/min	Power (Max./Cont.) kW (HP)	Torque (Max./Cont.) N·m (lbf·ft)	Driving Method
HYUNDAI WIA FAPUC - SMART PLUS	8,000	18.5/11 (25/15)	118/52.5 (87/38.7)	DIRECT
	[8,000 : High-torque]	15/11 (20/15)	286/143 (210.9/105.5)	
	[10,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[12,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[15,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
HYUNDAI-iTROL	[12,000]	16.2/8.5 (21.7/11.4)	119.7/63 (88.3/46.5)	
HEIDENHAIN	[12,000]	17/10 (22.8/13.4)	108.6/63.7 (80/47)	

SPECIFICATIONS

Specifications

[] : Option

ITEM			KF 5600 II	KF5600L II
TABLE	Table Size (L×W)	mm(in)	1,250×560 (49.2"×22")	1,500×560 (59.1"×22")
	Maximum Load Capacity	kg(lb)	1,000 (2,205)	
FEED	Travel (X/Y/Z)	mm(in)	1,100/560/520 [635] (43.3"/22"/20.5" [25"])	1,300/560/520 (51.2"/22"/20.5")
	Rapid Traverse Rate (X/Y/Z)	m/min	36/36/30	36/36/30
	Distance from Table Top to SP. Nose	mm(in)	150 ~ 670 (5.9" ~ 26.4") [150 ~ 785 (5.9" ~ 30.9")] [450 ~ 1,085 (17.7" ~ 42.7")]	150 ~ 670 (5.9" ~ 26.4")
	Distance from Column to SP. center	mm(in)	635 (23.4")	
	Slide Type	-	ROLLER TYPE LM GUIDE	
ATC	Number of Tools	ea	30 [40, 60]	30 [40]
	Tool Shank	-	BBT40 [12K, 15K : HSK-A63]	
	Max. Tool Dia. (W.T / W.O)	mm(in)	30T : Ø80/Ø125 (30T : Ø3.1"/Ø4.9") [40, 60T : Ø76/Ø125 (Ø3"/Ø4.9")]	30T : Ø80/Ø125 (30T : Ø3.1"/Ø4.9") [40T : Ø76/Ø125 (Ø3"/Ø4.9")]
	Max. Tool Length	mm(in)	300 (11.8")	
	Max. Tool Weight	kg(lb)	8 (17.6)	
	Tool Selection Method	-	RANDOM [FIXED]	RANDOM
	Tool Change Time	T-T	1.3	
		C-C	3.2 [Z-axis 635 mm (23.4") : 3.5]	3.5
TANK CAPACITY	Coolant Tank	ℓ (gal)	365 (96.4)	370 (97.7)
	Lubricating Tank	ℓ (gal)	4 (1)	
	Hydraulic Tank	ℓ (gal)	- (BOOSTER CYLINDER)	
POWER SUPPLY	Air Consumption (0.5MPa)	ℓ /min(gal)	110 (29)	
	Electric Power Supply	KVA	26	
	Thickness of Power Cable	Sq	Over 25	
	Voltage	V/Hz	220/60 (200/50)	
MACHINE	Floor Space (L×W)	mm(in)	2,830×2,176 (111.4"×85.7")	3,338×2,178 (131.4"×85.8")
	Height	mm(in)	3,028 (119.2") [3,443 (135.6")]	3,022 (119")
	Weight	kg(lb)	6,500 (14,330) [7,000 (15,432)]	6,700 (14,771)

Spindle

[] : Option

ITEM	Speed r/min	Power (Max./Cont.) kW (HP)	Torque (Max./Cont.) N·m (lbf·ft)	Driving Method
HYUNDAI WIA FANUC - SMART PLUS	8,000	18.5/11 (25/15)	118/52.5 (87/38.7)	DIRECT
	[8,000 : High-torque]	15/11 (20/15)	286/143 (210.9/105.5)	
	[10,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[12,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[15,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
HYUNDAI-ITROL	[12,000]	16.2/8.5 (21.7/11.4)	119.7/63 (88.3/46.5)	DIRECT
HEIDENHAIN	[12,000]	17/10 (22.8/13.4)	108.6/63.7 (80/47)	

SPECIFICATIONS

Specifications

[] : Option

ITEM			KF6700 II
TABLE	Table Size (L×W)	mm(in)	1,500×670 (59"×26.4")
	Maximum Load Capacity	kg(lb)	1,300 (2,866)
FEED	Travel (X/Y/Z)	mm(in)	1,300/670/635 (51.2"/26.4"/25")
	Rapid Traverse Rate (X/Y/Z)	m/min	36/36/30
	Distance from Table Top to SP. Nose	mm(in)	150 ~ 785 (5.9" ~ 30.9") [450 ~ 1,085 (17.7" ~ 42.7")]
	Distance from Column to SP. center	mm(in)	690 (27.2")
	Slide Type	-	ROLLER TYPE LM GUIDE
ATC	Number of Tools	ea	30 [40, 60]
	Tool Shank	-	BBT40 [12K, 15K : HSK-A63]
	Max. Tool Dia. (W.T / W.O)	mm(in)	30T : Ø80/Ø125 (30T : Ø3.1"/Ø4.9") [40, 60T : Ø76/Ø125 (Ø3"/Ø4.9")]
	Max. Tool Length	mm(in)	300 (11.8")
	Max. Tool Weight	kg(lb)	8 (17.6)
	Tool Selection Method	-	RANDOM [FIXED]
	Tool Change Time	T-T	sec
C-C		sec	3.5
TANK CAPACITY	Coolant Tank	ℓ (gal)	365 (96.4)
	Lubricating Tank	ℓ (gal)	4 (1)
	Hydraulic Tank	ℓ (gal)	- (BOOSTER CYLINDER)
POWER SUPPLY	Air Consumption (0.5MPa)	ℓ /min(gal)	110 (29)
	Electric Power Supply	KVA	26
	Thickness of Power Cable	Sq	Over 25
	Voltage	V/Hz	220/60 (200/50)
MACHINE	Floor Space (L×W)	mm(in)	3,338×2,527 (131.4"×99.5")
	Height	mm(in)	3,196 (125.8")
	Weight	kg(lb)	7,600 (16,755)

Spindle

[] : Option

ITEM	Speed r/min	Power (Max./Cont.) kW (HP)	Torque (Max./Cont.) N·m (lb·ft)	Driving Method
HYUNDAI WIA FAPUC - SMART PLUS	8,000	18.5/15 (25/20)	118/71.6 (87/52.8)	DIRECT
	[8,000 : High-torque]	15/11 (20/15)	286/143 (210.9/105.5)	
	[10,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[12,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
	[15,000]	18.5/11 (25/15)	118/52.5 (87/38.7)	
HYUNDAI-iTROL	[12,000]	16.2/8.5 (21.7/11.4)	119.7/63 (88.3/46.5)	DIRECT
HEIDENHAIN	[12,000]	17/10 (22.8/13.4)	108.6/63.7 (80/47)	

SPECIFICATIONS

Specifications

[] : Option

ITEM			KF5600/50 II	KF6700/50 II
TABLE	Table Size (L×W)	mm(in)	1,250×560 (49.2"×22")	1,500×670 (59"×26.4")
	Maximum Load Capacity	kg(lb)	1,000 (2,205)	1,300 (2,866)
SPINDLE	Spindle Taper	-	BBT50 [HSK-A100]	
	Spindle RPM	r/min	8,000	
	Spindle Power Output (Max./Cont.)	kW(HP)	22/11 (30/15)	
	Spindle Torque (Max./Cont.)	N·m(lbf·ft)	353.2/143 (260.5/105.5)	
	Spindle Driving Method	-	DIRECT	
FEED	Travel (X/Y/Z)	mm(in)	1,100/560/520 (43.3"/22"/20.5")	1,300/670/635 (51.2"/26.4"/25")
	Rapid Traverse Rate (X/Y/Z)	m/min	36/36/30	
	Distance from Table Top to SP. Nose	mm(in)	200~720 mm (7.9"~28.3")	200~835 mm (7.9"~32.9")
	Distance from Column to SP. center	mm(in)	635 (23.4")	690 (27.2")
	Slide Type	-	ROLLER TYPE LM GUIDE	
ATC	Number of Tools	ea	24	24 [30]
	Tool Shank	-	BBT50 [HSK-A100]	
	Max. Tool Dia. (W.T / W.O)	mm(in)	Ø125/Ø250 (Ø4.9"/Ø9.8")	
	Max. Tool Length	mm(in)	350 (13.8")	
	Max. Tool Weight	kg(lb)	15 (33)	
	Tool Selection Method	-	RANDOM	
	Tool Change Time			
		T-T	sec	2.8
		C-C	sec	5.5
TANK CAPACITY	Coolant Tank	ℓ (gal)	350 (92.5)	370(97.7)
	Lubricating Tank	ℓ (gal)	4	
	Hydraulic Tank	ℓ (gal)	- (BOOSTER CYLINDER)	
POWER SUPPLY	Air Consumption (0.5MPa)	ℓ /min(gal)	110 (29)	
	Electric Power Supply	KVA	26	
	Thickness of Power Cable	Sq	Over 25	
	Voltage	V/Hz	220/60 (200/50)	
MACHINE	Floor Space (L×W)	mm(in)	2,830×2,176 (111.4"×85.7")	3,338×2,527 (131.4"×99.5")
	Height	mm(in)	3,137 (123.5")	3,336 (131.3")
	Weight	kg(lb)	7,300 (16,094)	9,000 (19,842)
NC	Controller	-	HYUNDAI WIA FANUC i Series - Smart Plus	

Specifications are subject to change without notice for improvement.

CONTROLLER

HYUNDAI WIA FANUC i Series – SMART PLUS

[] : Option ☆ Needed technical consultation

Controlled axis / Display / Accuracy Compensation	
Control axes	3 axes (X, Y, Z) 4 axes (X, Y, Z, B)
Simultaneously controlled axes	3 axes [Max. 4 axes]
Least setting Unit	X, Y, Z axes : 0.001 mm (0.0001 inch) B axes : 1 deg [0.001] deg
Least input increment	X, Y, Z axes : 0.001 mm (0.0001 inch) B axes : 1 deg [0.001] deg
Inch / Metric conversion	
High response vector control	
Interlock	All axes / Each axis
Machine lock	All axes
Backlash compensation	± 0 ~ 9999 pulses (Rapid traverse / Cutting feed)
Position switch	
LCD / MDI	15 inch LCD unit (with Touch Panel)
Feedback	Absolute motor feedback
Stored stroke check 1	Over travel
Stored stroke check 2, 3	
Stored pitch error compensation	
Operation	
Automatic operation (Memory)	
MDI operation	
DNC operation	Needed DNC software / CF card
Program restart	
Wrong operation prevention	
Program check function	Dry run, Program check, Z axis Machine lock Stored limit check before move
Single block	
Search function	Program Number / Sequence Number
Handle interruption	
Interpolation functions	
Nano interpolation	
Positioning	G00
Linear interpolation	G01
Circular interpolation	G02, G03
Exact stop mode	Single : G09, Continuous : G61
Dwell	G04, 0 ~ 9999.999 sec
Skip	G31
Reference position return	1st reference, G28 / 2nd reference, G30 Ref. position check, G27
Single direction positioning	G60
Thread synchronous cutting	G33
Helical interpolation	Circular + Linear 2 axes (Max.)
Feed function / Acc. & Dec. control	
Manual feed	Rapid traverse Jog : 0~2,000mm/min (79 ipm) Manual handle : x1, x10, x100 pulses Reference position return
Cutting Feed command	Direct input F code
Feedrate override	0 ~ 200% (10% Unit)
Rapid traverse override	1%, 25%, 50%, 100%
Override cancel	
Feed per minute	G94
Feed per revolution	G95
Cylindrical interpolation	G07.1
Inverse time feed	G93
Look-ahead block	200 blocks (AI APC)
Program input	
Tape Code	EIA / ISO
Optional block skip	9 ea
Absolute / Incremental program	G90 / G91
Program stop / end	M00, M01 / M02, M30
Maximum command unit	± 999,999.999 mm (± 99,999.9999 inch)
Plane selection	X-Y, G17 / Z-X, G18 / Y-Z, G19
Workpiece coordinate system	G52, G53, 48 pairs (G54.1 P1 ~ 48)
Manual absolute	Fixed ON
Programmable data input	G10
Sub program call	10 folds nested
Custom macro	#100 ~ #199, #500 ~ #999
Programmable mirror image	G51.1, G50.1
G code preventing buffering	G4.1
Optional chamfering corner R	

Program input	
Polar coordinate command	G15, G16
Canned cycle	G73, G74, G76, G80 ~ G89
Scaling	G50, G51
Coordinate system rotation	G68, G69
Conversational Program	SmartGuide-i
Auxiliary function / Spindle speed function	
Level-up M Code	Multi / Bypass M code
Spindle speed function	S & 5 digit, Binary output
Spindle override	0% ~ 150% (10% Unit)
Spindle orientation	M19
Retraction for rigid tapping	
FSSB high speed rigid tapping	
Tool function / Tool compensation	
Tool function	Max. T8 digit
Tool life management	
Tool offset pairs	400 pairs
Tool nose / radius compensation	G40, G41, G42
Tool length offset	G43, G44, G49
Tool offset memory C	Tool geometry and wear (Cutter and tool length)
Tool length measurement	Z axis Input C
Editing function	
Part program storage size	5,120m (2MB)
No. of registerable programs	1,000 ea
Program protect	
Background editing	
Extended part program editing	Copy, move and change of NC program
Memory card program edit	
Data input / output & Interface	
I/O interface	CF card, USB memory Embedded Ethernet interface
Screen hard copy	
External message	
External key input	
External workpiece number search	
Automatic data backup	
Setting, display and diagnosis	
Self-diagnosis function	
History display & Operation	Alarm & Operator message & Operation
Run hour / Parts count display	
Maintenance information	
Actual cutting feedrate display	
Display of spindle speed / T code	
Graphic display	
Operating monitor screen	Spindle / Servo load etc.
Power consumption monitoring	Spindle & Servo
Spindle / Servo setting screen	
Multi language display	Support 24 languages
Display language switching	Selection of 5 optional Languages
LCD Screen Saver	Screen saver

Option	
Fast ethernet	Needed option board
Data server	Needed option board
Protection of data at 8 levels	
Additional Axis	
Manual handle feed	2/3 units #100 ~ #199, #500 ~ #999, #98000 ~ #98499
Add. Workpiece	Max. 300 pairs (G54.1 P1 ~ P300)
AICC II	400 blocks ☆

Figures in inch are converted from metric values.

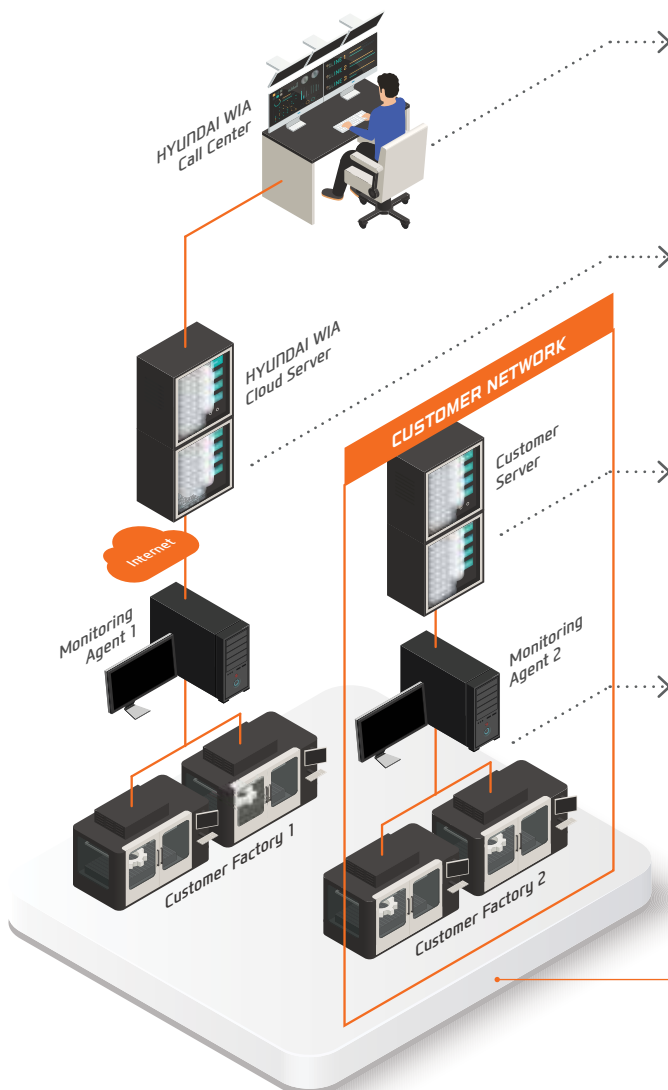
The FANUC controller specifications are subject to change based on the policy of company CNC supplying.

HW-MMS

HYUNDAI WIA Machine Monitoring System



A manufacturing machine self-developed by Hyundai Wia, HW-MMS is a unique software capable of monitoring the operation status of manufacturing machines in factories, a smart solution to improve manufacturing conditions of customers



HW-MMS Remote

Hyundai Wia Call Center's remote diagnosis service provides a HMI/video diagnostic function.



HW-MMS Cloud

A cloud server-based equipment monitoring system for collecting and analyzing facility operation data.



HW-MMS Edge

A client server-based tool monitoring system for collection/analysis of facility operation data. (Compatible with client MES / ERP interface)



HW-MMS Edge Plus

This is a facility big data-based smart factory solution that collects and analyzes spindle/feed data, tool lifespan, NC processing files, etc. in real time



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