

KF-II Series

KF4600 II | KF5600 II | KF6700 II | KF5600M | KF6700M

HYUNDAI WIA Vertical Machining Center



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	Spindle						Y-axis Stroke			ATC	
	Direct					Built-in 20,000	460 mm (18.1")	560 mm (22")	670 mm (26.4")	30 EA	40 EA
	8,000	*8,000	10,000	12,000	15,000						
KF4600 II	●	○	○	○	○		●			●	○
KF5600 II	●	○	○	○	○			●		●	○
KF6700 II	●	○	○	○	○				●	●	○
KF5600M						●		●		●	○
KF6700M						●			●	●	○

* High-Torque Spindle

● : Standard ○ : Option

KF-III 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

High Precision Spindle

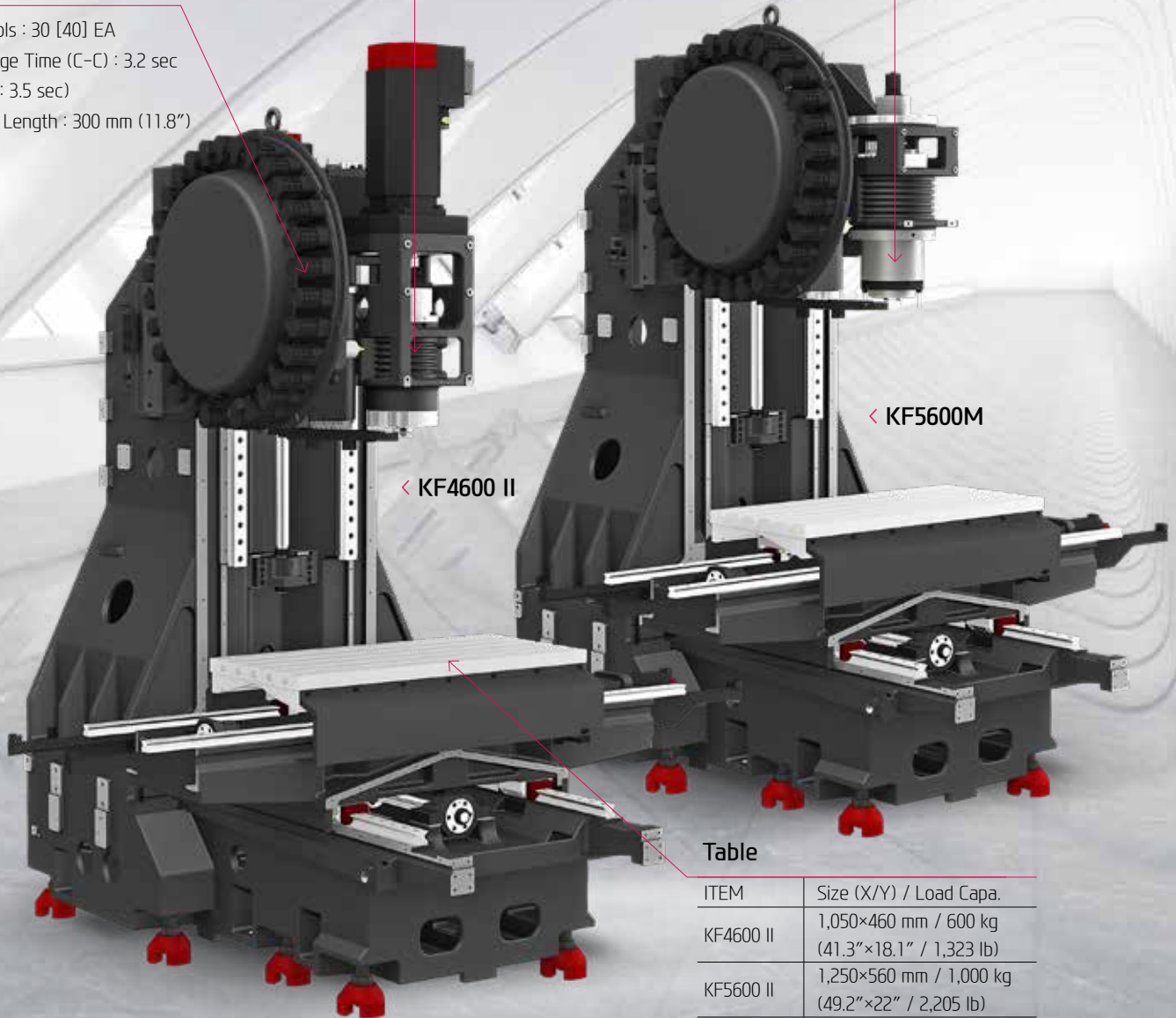
- Direct Spindle
8,000/10,000/12,000/15,000 rpm
- Spindle Heat Distortion Compensation Device Standard (Sensorless)

High Precision Spindle

- Built-in Spindle : 20,000 rpm
- Spindle Heat Distortion Compensation Device Standard (Sensorless)

Magazine

- No. of Tools : 30 [40] EA
- Tool Change Time (C-C) : 3.2 sec (KF6700II : 3.5 sec)
- Max. Tool Length : 300 mm (11.8")
- BBT40



< KF5600M

< KF4600 II

Table

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

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")

KF5600M

1,100/560/520 mm

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

KF6700M

1,300/670/635 mm

(51.2"/26.4"/25")

Rapid Traverse Rate (X/Y/Z)

KF4600 II

36/36/30 [42/42/36] m/min

(1,417/1,417/1,181 [1,654/1,654/1,417] ipm)

KF5600 II

36/36/30 [42/42/36] m/min

(1,417/1,417/1,181 [1,654/1,654/1,417] ipm)

KF6700 II

36/36/30 m/min

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

KF5600M

36/36/30 m/min

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

KF6700M

36/36/30 m/min

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

03 HIGH PRECISION SPINDLE

Excellent machining performance with high-precision spindle

KF4600 II/5600 II/6700 II Spindle Specifications

PC	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 (25/15 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)	

KF5600M/6700M Spindle Specifications

PC	Speed r/min	Motor (Max./Cont.)	Torque (Max./Cont.)	Type
FANUC 31i-B	20,000 rpm	22/18.5 kW (29.5/25 HP)	98/80 N·m (72.3/59 lbf·ft)	Built-in

04 ATC & MAGAZINE

High Productivity Achieved with High Rigidity, Accuracy Machining

No. of Tools

30 [40]_{EA}

Tool Selection Method

Random [Fixed]

Max. Tool Length

300_{mm} (11.8")

Max. Tool Weight

8_{kg} (18 lb)

Tool Shank

BBT40 [12,000/15,000/20,000 rpm : HSK-A63]

Max. Tool Dia. (W.T/W.O)

30T : Ø80 [40T : Ø76]/Ø125_{mm} (30T : Ø3.1" [40T : Ø3"]/Ø4.9")

[] : Option

07 HYUNDAI WIA FANUC – SMART PLUS

The Compatible All-round Control



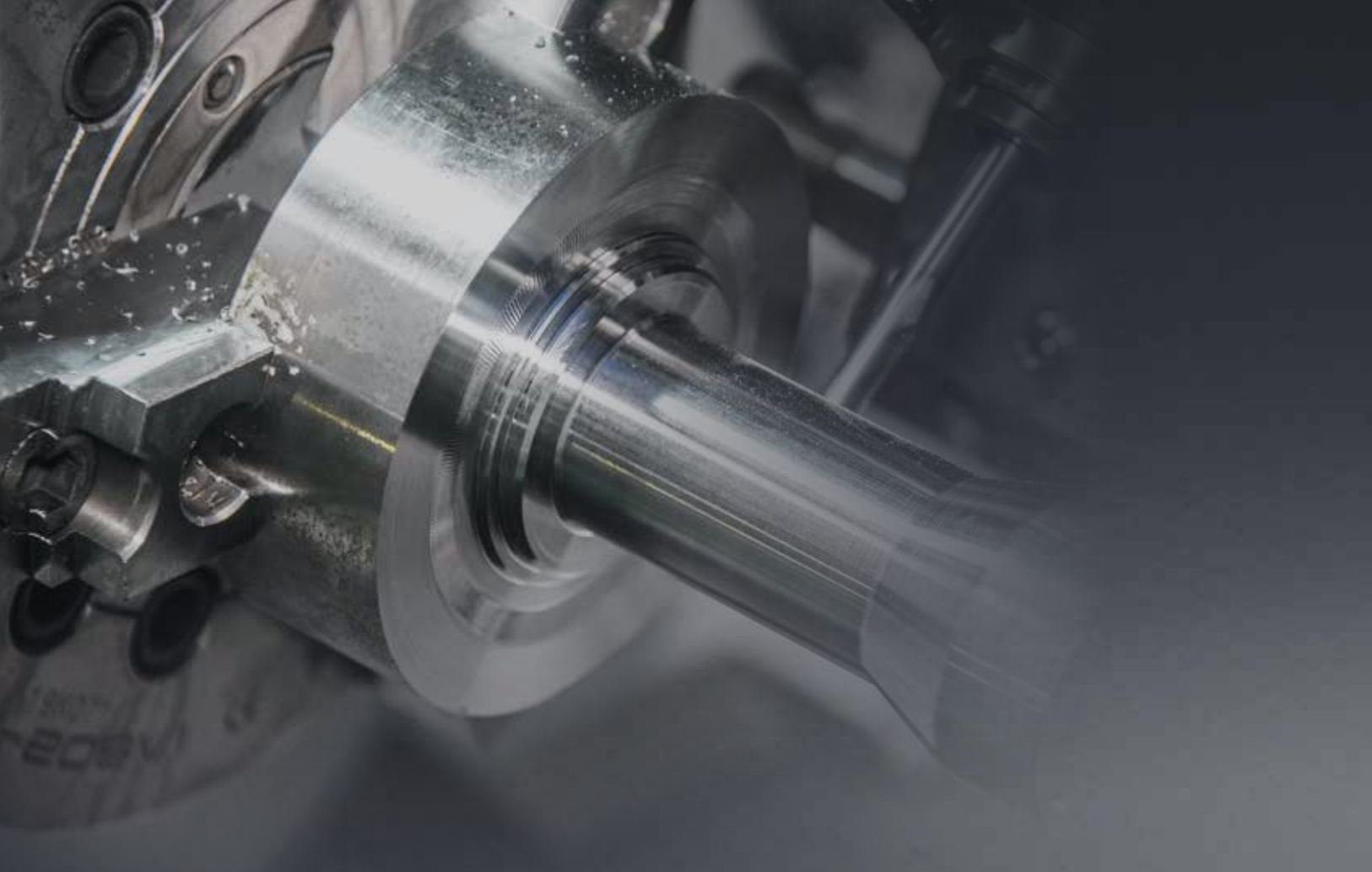
15" Touch-type Monitor as a standard

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	0.1µm 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

SE 2200 Series

High Speed, Rigidity and Productivity Economical CNC Turning Center

HYUNDAI WIA CNC Turning Center



Technical Leader

The CNC Turning Center SE Series, designed with HYUNDAI WIA's engineering expertise to maximize productivity by enhancing rigidity and accuracy of machining.

ITEM	Main Sp.			Sub Sp.	Bed Type		Turret	
	6"	8"	10"	5"	Std. Bed	Long Bed	Std. Turret	BMT45
SE2200A	•				•		•	
SE2200LA	•					•	•	
SE2200MA	•				•			•
SE2200LMA	•					•		•
SE2200LMSA	•			•		•		•
SE2200		•			•		•	
SE2200L		•				•	•	
SE2200M		•			•			•
SE2200LM		•				•		•
SE2200LMS		•		•		•		•
SE2200LC			•			•	•	
SE2200LMC			•			•		•
SE2200LMSC			•	•		•		•

SE 2200 Series

Global-standard CNC Turning Center with High Speed, Rigidity and Productivity

- 30° slanted one-piece bed structure with high rigidity
- Ensured high-rigidity applying Roller guideway on all axes (X/Z-axis: 30/36m/min)
- Improved user convenience by applying the latest controller of FANUC
- Prepared user-oriented lineup including long-bed, mill turret and sub-spindle
- Compact structure with internal-motor design (for standard-type bed)
- Ergonomic design for convenient access to chuck and tool



01 BASIC STRUCTURE

The Best Productivity 6" / 8" / 10" Compact CNC Turning Center

Mill Turret

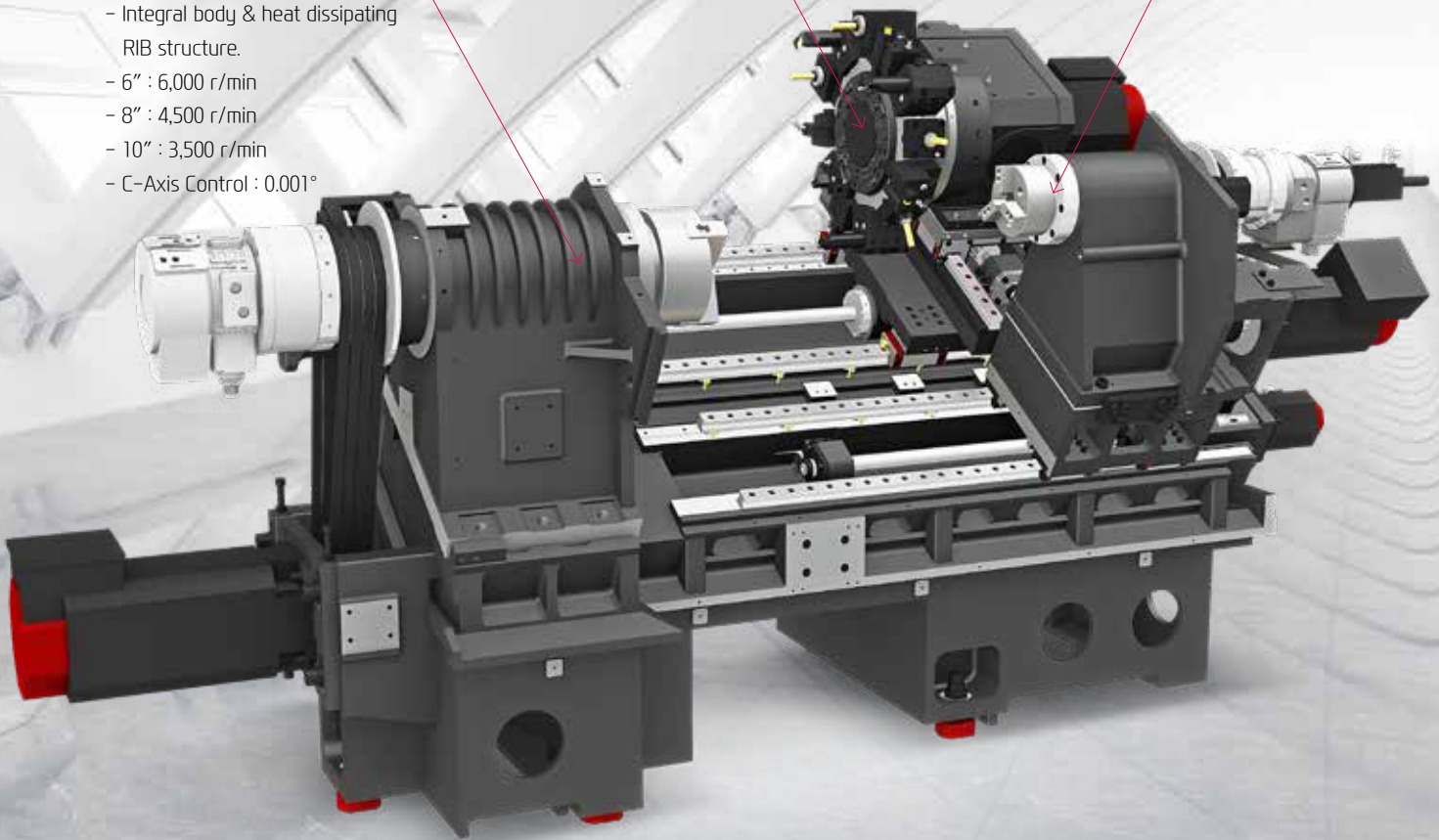
- BMT45 (12 [24] Station)
- 6,000 r/min
- Collet Size : ER20 { $\varnothing 13$ ($\varnothing 0.51''$)}

Sub Spindle

- 5" / 6,000 r/min
- C-Axis Control : 0.001°

High Precision Spindle

- Integral body & heat dissipating RIB structure.
- 6" : 6,000 r/min
- 8" : 4,500 r/min
- 10" : 3,500 r/min
- C-Axis Control : 0.001°



02 HIGH PRECISION SPINDLE

Long Lasting, High Accuracy & Excellent Performance CNC Turning Center

Spindle Specifications

[] : Option ● : Power Up

ITEM	Spindle Speed	Motor (Max./Cont.)	Torque (Max./Cont.)	Driving Method
6" Spindle	6,000 rpm (FANUC)	15/11 kW (20/15 HP)	127/70 N·m (93.7/51.6 lbf·ft)	Belt
	[6,000 rpm (iTROL)]	[13.5/9 kW (18/12 HP)]	[114.5/76.4 N·m (84.5/56.3 lbf·ft)]	
8" Spindle	4,500 rpm (FANUC)	15/11 kW (20/15 HP)	167/92 N·m (123.2/67.9 lbf·ft)	
	[4,500 rpm (iTROL)]	[13.5/9 kW (18/12 HP)]	[150.3/100 N·m (110.9/73.8 lbf·ft)]	
10" Spindle	3,500 rpm (FANUC)	18.5/11 kW (25/15 HP)	269/120 N·m (198.4/88.5 lbf·ft)	
	● [3,500 rpm (FANUC)]	● [18.5/15 kW (25/20 HP)]	● [269/164 N·m (198.4/121 lbf·ft)]	
	[3,500 rpm (iTROL)]	[13.5/9 kW (18/12 HP)]	[197.6/132 N·m (145.7/97.4 lbf·ft)]	
Sub Spindle	6,000 rpm (FANUC)	7.5/3.7 kW (10/5 HP)	63.6/23.6 N·m (46.9/17.4 lbf·ft)	
	[6,000 rpm (iTROL)]	[7.4/4.9 kW (9.9/6.6 HP)]	[47/31.1 N·m (34.7/22.9 lbf·ft)]	

03 SERVO TURRET

High speed, High Accuracy, Highly Reliable Servo Turret

Servo Turret

No. of Tools

12^{EA}

Tool Size (O.D/I.D)

□ 25/Ø40 mm (□ 1"/Ø1 1/2")

Indexing Time

0.15^{sec}

BMT45 Mill Turret

Type	Speed	Motor (Max./Cont)	Torque (Max./Cont)	Collet Size
FANUC iTROL	6,000 rpm	3.85/2.59 kW (5.16/3.47 HP) Cont : 2.8 kW (3.8 HP)	36.7/18.5 N·m (27.1/13.6 lb·ft) Cont : 27 N·m (19.9 lb·ft)	ER20 / Ø13 (0.6")

Quantity of mill turret tools: Std. 2ea / Opt. 24ea - Various machining with increased capacity (Prior model : max. 12ea)

SE-Y SERIES

04 BMT TURRET

High speed, High Accuracy, Highly Reliable Servo Turret



05 HYUNDAI WIA FANUC – SMART PLUS

The Compatible All-round Control



15" Touch-type Monitor as a standard

	Fast Cycle Time Technology
Smart Machine Control	Fine Surface Technology
	Smart Servo Control Technology
Conversational Program	SmartGuide-i
i-HMI	Machining-aid Function
Part Program Storage	5120M (2MB)
No. of Registerable Programs	1000 EA