

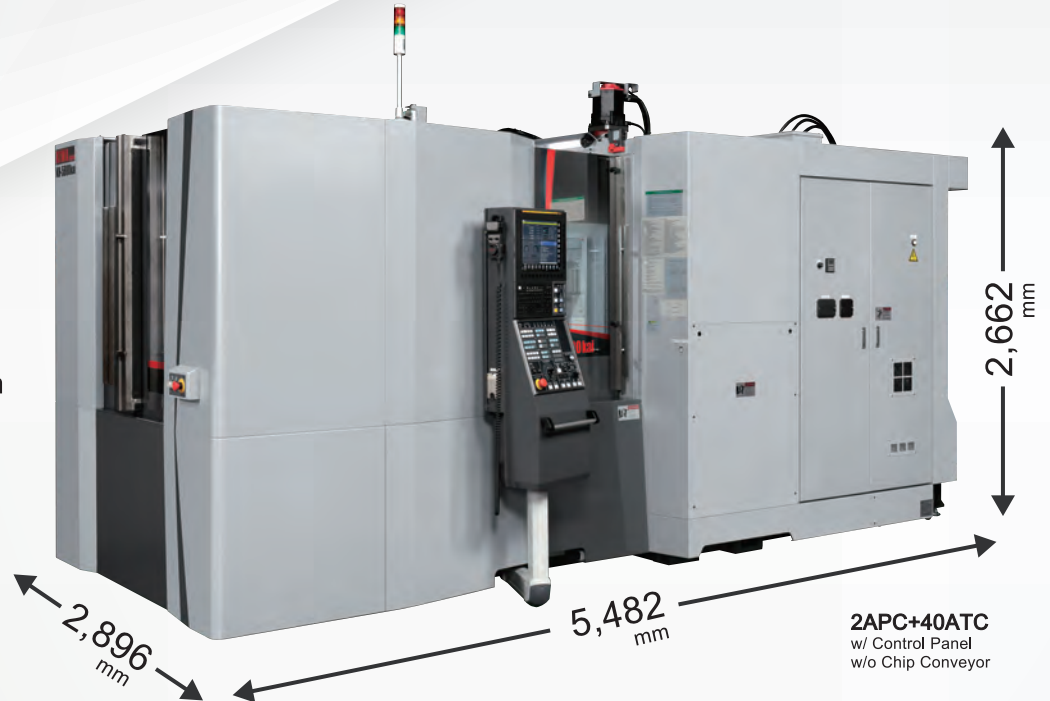
KIWA Japan

KH-5800kai

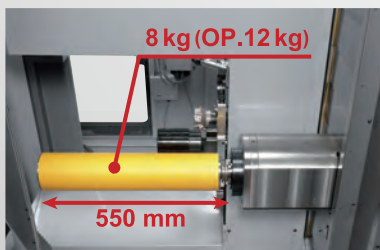
Horizontal Machining Center



X/Y/Z TRAVEL:
800/800/850 mm



Largest Strokes in its Class (#40 Taper) for Small Footprint



**Large and Heavy Tools
Acceptable**

Number of Tools:
40 (OP.60/120/240)



**Large Workpiece Size
for #40 Taper**

Max. Load:
500kg/pallet (OP.750kg/pallet)



**Expandable APC&ATC
in the Field**

2 to 6 pallets
40 to 60 tools
(Simple Oval Shaped Magazine)
120 to 240 tools
(Larger Tool Storage Magazine)

KIWA MACHINERY CO., LTD.

KH-5800kai

● TRAVEL			● AUTOMATIC TOOL CHANGER		
X-axis	mm [inch]	800 [31.5] for 12,000/15,000min ⁻¹ (OP. 740 [29.1] for 20,000min ⁻¹)	Type of tool shank	BT40/CAT40 for 12,000/15,000min ⁻¹ (OP. HSK-A63 for 15,000/20,000min ⁻¹)	
Y-axis	mm [inch]	800 [31.5]	Type of pull-stud	JIS	
Z-axis	mm [inch]	850 [33.5] (OP. 840 [33.1] for 630x630mm Pallet)	Number of tools	40 (OP. 60 / 120 / 240)	
Spindle center to pallet surface	mm [inch]	50-850 [2.0-33.5]	Max. tool diameter (Adjacent pots full/empty)	mm [inch]	Dia. 70 / 140 [Dia. 2.8 / 5.5] for 40/60ATC Dia. 95 / 185 [Dia. 3.7 / 7.3] for 120/240ATC
Spindle nose to pallet center	mm [inch]	75-925 [3.0-36.4] (OP. 85-925 [3.3-36.4] for 630x630mm Pallet)	Max. tool length	mm [inch]	550 [21.7]
Pallet top height (from the floor)	mm [inch]	1,069 [42.1]	Max. tool weight	kg [lbs]	8 [17.6] (OP.12 [26.5] Max.moment 13.5Nm)
● PALLET			Tool selection system	Random / Fixed tool pot for 40/60ATC Fixed tool pot for 120/240ATC	
Pallet size (x 2 pallets)	mm [inch]	500x500 [19.7x19.7] (OP. 400x400 [15.7x15.7] / 630x630 [24.8x24.8])	Tool to tool / Chip to chip	sec.	1.1 / 2.7
Max. workpiece diameter	mm [inch]	Dia.800 [31.5]	● MOTOR		
Max. workpiece height	mm [inch]	1,000 [39.4]	Spindle motor	kw [hp]	37 [50] (S3 15%)
Max. load	kg [lbs]	500 [1,100] /pallet (OP.750 [1,650] /pallet)	Feed axes motors (X/Y/Z/B)	kw [hp]	4.5/4.5/4.5/2.7 [6.0/6.0/6.0/3.6]
Configuration	mm [inch]	25-M16 P=100 [3.9] (OP. 25-M16 P=80 [3.1] for 400x400mm Pallet 25-M16 P=125 [4.9] for 630x630mm Pallet)	Lubrication pump motor	W [hp]	Oil: 18 [0.024] / Grease: 20 [0.027]
Min. indexing degree	degrees	0.001	Coolant pumps	W [hp]	550 [0.74] x 2 pcs (60Hz) 370 [0.5] x 1 pc / 550 [0.74] x 1 pc (50Hz)
Indexing speed	sec./90 degrees	1.1	Hydraulic pump	kw [hp]	2.2 [2.9]
Pallet clamping force/clamping system	kN	40 (=10x4) cornes / Mechanical lock	● SUPPLY		
B-axis clamping torque	Nm	5,000	Electric voltage	V	200 (50/60Hz)
● SPINDLE			Electric power supply	KVA	48
Spindle speed	min ⁻¹	12,000 Direct drive (OP. 15,000 Direct drive / 20,000 Built-in)	Air pressure	MPa [psi]	0.4 [58]
Spindle rated torque	Nm	249 [S3 15%] for 12,000/15,000min ⁻¹ (OP. 200 [S3 15%] for 20,000min ⁻¹)	Air volume	liters [gal] / min.	360 [95]
Spindle taper		ISO 7/24 Taper NT No. 40	● TANK		
● FEED			Hydraulic unit tank	liters [gal]	20 [5.3]
Rapid feed (X/Y/Z)	m/min.	80/80/80 (OP. 80/80/60 for Max. load 750kg / pallet)	Coolant tank	liters [gal]	510 [134.7]
Cutting feed	m/min.	30	Lubrication tank	liters [gal]	Oil:1.8 [0.5] / Grease cartridge:0.7 [0.2]
Table rotating speed	min ⁻¹	66.6 (OP. 55.5 for Max.load 750kg /pallet)	● SIZE		
● AUTOMATIC PALLET CHANGER			Floor space (w/o Chip conveyor)	mm [inch]	2,896 x 5,482 [114.0x215.8] (for 40 / 60ATC) 3,128 x 5,482 [123.1x215.8] (for 120 / 240ATC)
Number of pallets		2 (OP. 6)	Machine height	mm [inch]	2,662 [104.8] (40 / 120ATC), 2,774 [109.2] (60ATC) 3,153 [124.1] (240ATC)
Pallet change system		Rotation	Machine weight	kg [lbs]	9,650 [21,280] (40ATC), 10,400 [22,930] (120ATC) 11,200 [24,690] (240ATC)

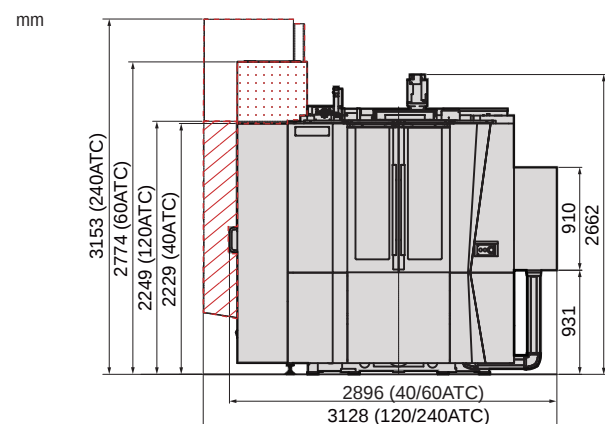
FANUC 31i-B Plus

- Simultaneously controllable axes: 4 axes
- Spindle override 50- 150% (each 10%)
- Cutting feed override 0 - 200% (each 10%)
- Rapid traverse rate override 1,2,4,8,15,25,50,100%
- Rapid traverse bell-shaped acceleration/deceleration
- Position switch
- Manual handle feed 1unit
- Thread cutting, synchronous cutting
- Workpiece coordinate system

- Addition of workpiece coordinate system 48 sets
- Programmable data input G10
- Custom macro
- Canned cycles for drilling
- Run hour and parts count display
- Tool offset: 400 pcs
- Tool radius/Tool nose radius compensation
- Part program storage: 4 Mbyte
- Number of registrable programs: 1,000 pcs
- AI contour control II+Expansion (400 Look-ahead Blocks)
- Stored pitch error compensation

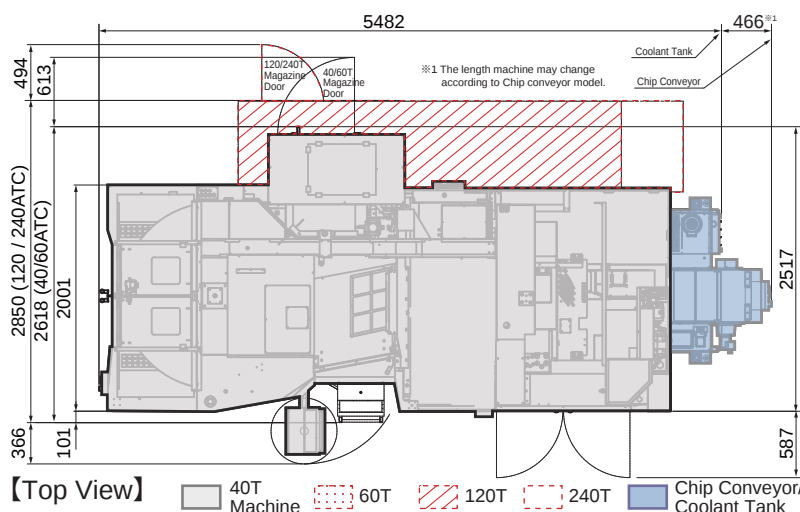
- Background editing
- Rigid tapping
- Helical interpolation
- Automatic corner override
- Tool offset memory C
- Tool management function
- Scaling
- Single direction positioning
- Programmable mirror image
- Coordinate system rotation

MACHINE SIZE



[Front View]

Specifications and dimensions are subject to change without notice.



[Top View]

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