

XF2000

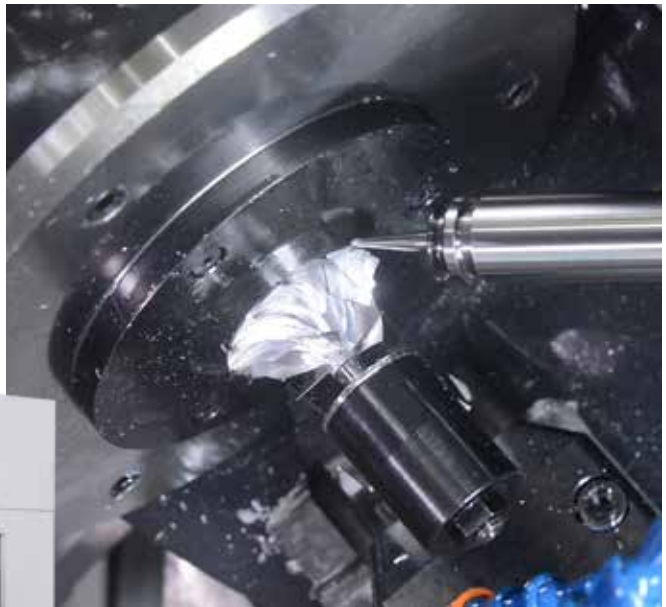
HYUNDAI WIA 5-Axis Machining Center for Impeller Cutting



Technical Leader

The XF2000, a high-speed / high-precision compact 5-axis simultaneous machining tool developed by HYUNDAI WIA German Research Center, has an optimal structure for productivity.

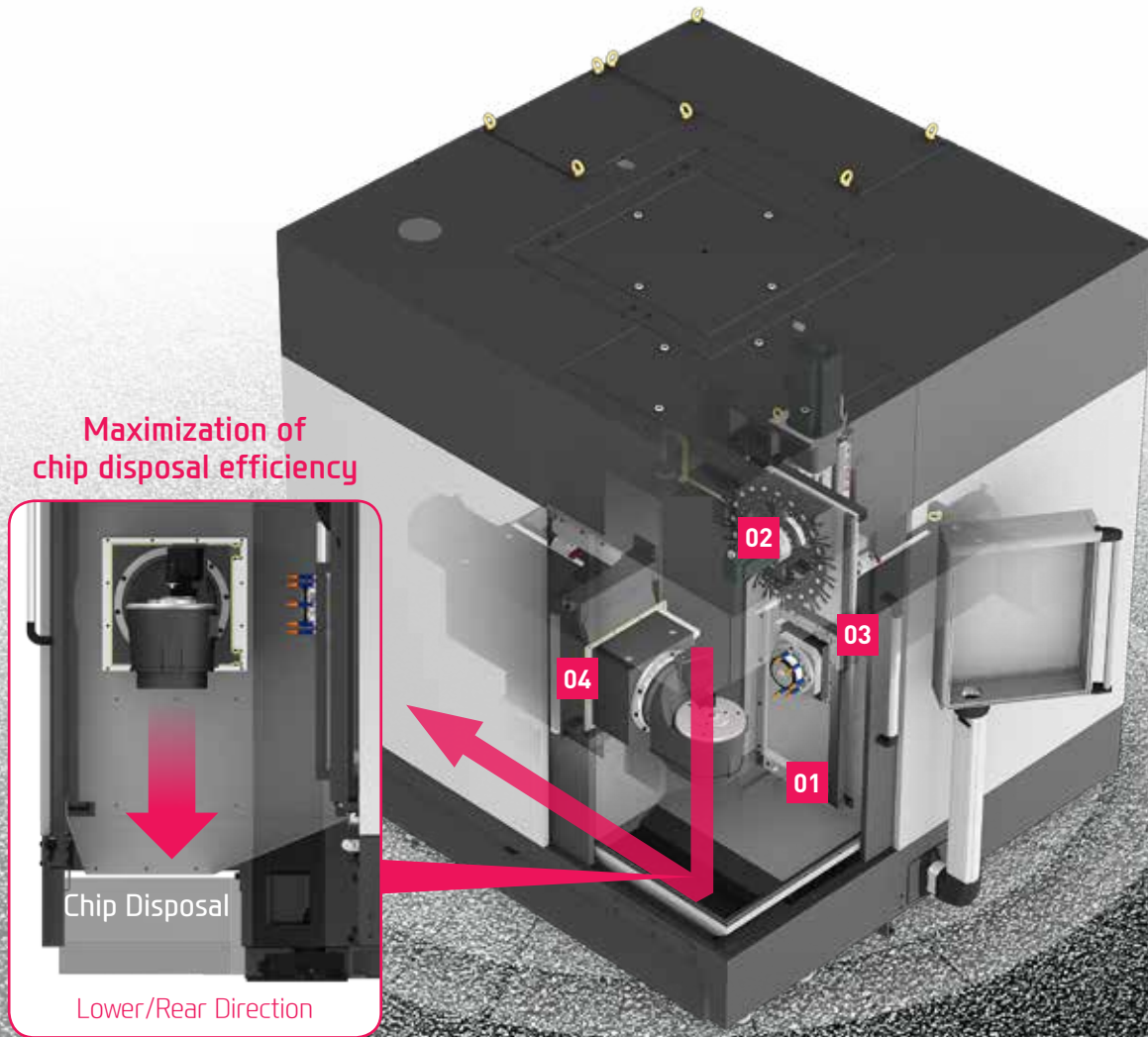
The XF2000 is composed of an integrated column and cantilever-type table for improvement of maintenance and user convenience. In addition, we will provide our customers with remarkable productivity at the 2G of acceleration / deceleration of our highest level.



01 Basic Features

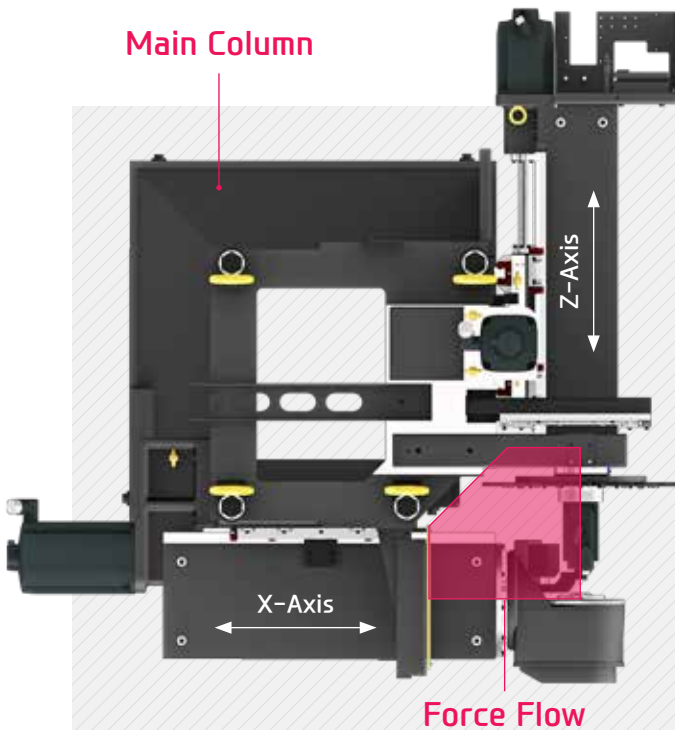
XF2000

High-Speed / High-Precision
Compact 5-axis Simultaneous Machining Center for Impeller Cutting



Excellent Performance & High Accuracy Cutting

- ◎ **Travel** (X/Y/Z axis) :
300/300/200 mm (11.8"/11.8"/7.9")
- ◎ **Rapid Traverse Rate** (X/Y/Z axis) :
50/50/50 m/min (1,969/1,969/1,969 ipm)



One-piece Bed & Column

The XF2000 maximizes the dynamic rigidity by designing bed and column as an integral type, and improves the structural stability by concentrating the flow force between the work space and the tool.

Linear Scale (Std.)

Applied linear scale as a standard for high-precision machining through the compensation of thermal displacement.



High Speed Roller LM Guideway

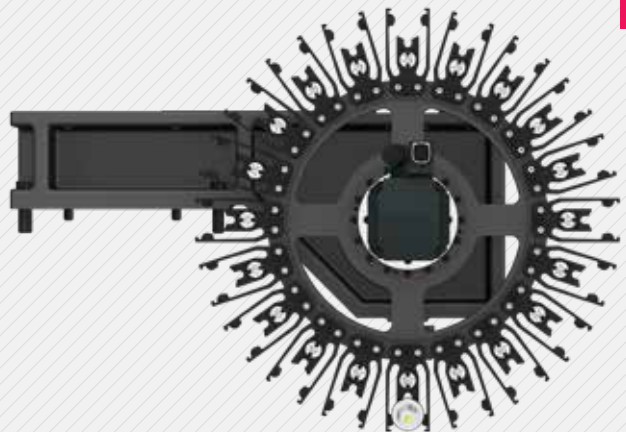
Roller LM guide with high acc./deceleration and rigidity has applied to reduce non-cutting time.

⊙ **Acc./Deceleration Speed (X/Y/Z axis) : 2G/2G/2G**

ATC & Magazine

Developed as a pickup-type magazine with a relatively simple structure, automatic tool loading device is unnecessary, which is excellent in maintenance.

- ⊙ **No. of Tools : 20 EA**
- ⊙ **Tool Change Time (C-C) : 4.5 sec**
- ⊙ **Max. Tool Diameter : Ø50 (Ø2")**
- ⊙ **Max. Tool Length : 200 mm (7.9")**
- ⊙ **Max. Tool Weight : 1.5 kg (33 lb)**



02 Spindle & Table

XF2000

Spindle and DDM table for various shape of machining

03

Built-In Spindle

Designed with a built-in motor structure, the spindle provides maximum acceleration and deceleration while suppressing vibration and heat that can occur during the high-speed rotation. This leads to the excellent performance for high precision machining.

- Spindle Speed : 40,000 r/min
- Max. Output : 26 kW (34.9 HP)

Spindle Cooling

We provide spindle oil cooling device as standard, stable spindle temperature can be maintained at all times even during long machining, ensuring stable machining capability.



HSK Tool Holder

By applying the HSK-E40, which has less expansion of the spindle taper during high-speed rotation, it is possible to achieve high precision accuracy even at high-speed.



HYUNDAI WIA
MACHINE TOOL

XF2000
5-Axis Machining Center for
Impeller Machining

04

5-axis DDM Table

Precise 5-axis control can be done simultaneously by adopting DDM table, ensuring world-class travel speed to enhance productivity.

- Table Size : $\varnothing 200$ ($\varnothing 7.9''$)
- Load Capacity : 15 kg (33 lb)
- Tilting Angle (A axis) : 180° (0°~180°)
- Rapid Traverse Rate (A/B axis) : 200/200 rpm

A/B-axis Rotary Scale as Standard

High quality machining is achieved by scale built-in YRT bearing which is applied to the A/B-axis of rotary table.



SPECIFICATIONS

ITEM		XF2000	
TABLE	Table Size	mm(in)	Ø200 (Ø7.9")
	Load Capacity	kg(lb)	15 (33)
	Max. Macining Height	mm(in)	100 (3.9")
	Table Driving Method	-	Direct Drive Motor
SPINDLE	Spindle Taper	inch	HSK-E40
	Spindle RPM	r/min	40,000
	Spindle Power Output (Max./Cont.)	kW(HP)	26/18 (34.9/24.1)
	Spindle Torque (Max./Cont.)	Н·m(lbf·ft)	9.9/6.9 (7.1/5.1)
	Spindle Driving Method	-	BUILT-IN
FEED	Travel (X/Y/Z)	mm(in)	300/300/200 (11.8"/11.8"/7.9")
	Tilting Angle (A)	deg	180° (0°~180°)
	Rapid Traverse Rate (X/Y/Z)	m/min(ipm)	50/50/50 (1,969/1,969/1,969)
	Rapid Traverse Rate (A/B)	rpm	200/200
	Acc./Deceleration Speed (X/Y/Z)	G	2/2/2
	Slide Type	-	ROLLER GUIDE
ATC	Number of Tools	ea	20
	Tool Shank	-	HSK-E40
	Max. Tool Dia./ Length	mm(in)	Ø50/200 (Ø2"/7.9")
	Max. Tool Weight	kg(lb)	15 (33)
	Tool Change Time	sec	4.0
		C-C	sec
MACHINE	Floor Space (L×W)	mm(in)	2,208×2,320 (86.9"×91.3")
	Height	mm(in)	2,358 (92.8")
	Weight	kg(lb)	6,000 (13,228)
CNC	Controller	-	SIEMENS 840D sl

Specifications are subject to change without notice for improvement.

External Dimensions

unit : mm(in)

