

HS-630i with AVEREX-FANUC MPro III SPECIFICATIONS

	DESCRIPTIONS	IMPERIAL	METRIC
TRAVEL	X-axis, Y-axis, Z-axis	41.3", 35.4", 40.2" (10,000rpm Spindle) 41.3" / 34.6" / 40.2" (6,000rpm Spindle)	1,050 mm, 900 mm, 1,020 mm (10,000 min ⁻¹ Spindle) 1,050mm, 880mm, 1,020mm (6,000 min ⁻¹ Spindle)
	Spindle center to pallet surface	3.1" – 34.6" (10,000rpm Spindle)	80 – 980 mm (10,000 min ⁻¹ Spindle)
	Spindle nose to pallet center Pallet top height (from the floor)	3.9" – 34.6" (6,000rpm Spindle) 2.0" – 42.1" 52.4"	100 – 980 mm (6,000 min ⁻¹ Spindle) 50 – 1,070mm 1,330 mm
TABLE	Table size	24.8" x 24.8"	630 mm x 630 mm
	Workpiece max. size	Ø39.4" x 51.2"	Ø1,000 x 1,300 mm
	Max. payload	2,640 lb	1,200 kg
	Configuration	M16 x 30L P=4.9"	M16 x 30L P=125 mm
	Min. indexing degree	1" [opt: 0.001"]	1" [opt: 0.001"]
SPINDLE	Indexing speed	2.2 sec/90" 2.0 sec/90" [opt: 0.001"]	2.2 sec/90" 2.0 sec/90" [opt: 0.001"]
	Pallet clamping system	Mechanical Lock	Mechanical Lock
	Pallet clamping force	3,590 lb x 4 cone	16kN x 4 cone
	B-axis clamping torque	36,140lb-ft 3,023lb-ft [opt: 0.001"]	49,000Nm 5,500Nm [opt: 0.001"]
	Spindle speed	20 – 10,000 rpm [opt: 6,000 rpm]	20 – 10,000 rpm [opt: 6,000 min ⁻¹]
	Spindle rated torque	442 lb-ft (15%ED) 309 lb-ft (15 min) 885 lb-ft (10% ED) [opt: 6,000 rpm] 481 lb-ft (30 min) [opt: 6,000 rpm]	600Nm (15%ED) 420Nm (15 min) 1202Nm (10% ED) [opt: 6,000 min ⁻¹] 653 Nm (30 min) [opt: 6,000 min ⁻¹]
	Spindle acceleration / declaration	5.5 sec (0-10K rpm)/5.5 sec (10K-0 rpm)	5.5 sec (0-10K min ⁻¹)/5.5 sec (10K-0 min ⁻¹)
	Spindle taper	ISO 7/24 Taper NT No. 50	ISO 7/24 Taper NT No. 50
	Through spindle coolant	435 psi	3.0 Mpa
	FEED	Rapid feed (X/Y/Z)	1,969 ipm
Cutting feed (X/Y/Z)		0.04-1,969 ipm	1-50,000 mm/min
Table rotating speed		Parkson: 16.6 rpm Tsuksakoma: 22.2 rpm	Parkson: 16.6 min ⁻¹ Tsuksakoma: 22.2 min ⁻¹
Guide ways (X/Y/Z)		Roller ways [THK]	Roller ways [THK]
Acceleration (X/Y/Z)		0.7 G/1.4 G/0.9 G	0.7 G/1.4 G/0.9 G
ATC	Ballscrews size	Ø1.97"	Ø50mm
	Type of tool shank	BBT 50 /CAT 50 [opt.]	BBT 50 /CAT 50 [opt.]
	Type of pull-stud	JIS 50P/CAT 50 [opt.]	JIS 50P/CAT 50 [opt.]
	Number of tools	60	60
	Max. tool diameter (Adjacent pots full / empty)	4.5" / 11.8"	Ø115mm / Ø300mm
	Max. tool length	23.6"	600 mm
	Max. tool weight	55 lb	25 kg
APC	Tool selection system	Random	Random
	Tool to tool	2 sec	2 sec
	Tool to chip	3 sec (heavy tool programmable) 7 sec	3 sec (heavy tool programmable) 7 sec
	Chip to chip	8 sec (heavy tool programmable)	8 sec (heavy tool programmable)
MOTOR	Number of pallets	2 [opt: 6]	2 [opt: 6]
	Pallet change system	Rotation	Rotation
	APC exchange time	15 sec	15 sec
	Spindle motor	60 / 50 hp	45 / 37 kW
	Feed axes motors (X/Y/Z/B)	7.4 / 6.7 / 7.4 / 5.4 hp	5.5 / 5.0 / 5.5 / 4.0 kW
	Lubrication pump motor	0.024 hp	18W
	Spindle coolant pump	1.7hp	1,270 W
	Chips flush (base) coolant pump	2.2hp	1,620 W
	Through spindle coolant pump	3.0hp	2,200 W
	Overhead shower flush coolant pump	3.2hp	2,350 W
SUPPLY	Hydraulic pump	3.0 hp	2.23 kW
	Electric voltage	200 - 230 V	200 - 230 V
	Electric power supply	45 / 50 kVA, 70kVA	45 / 50 kVA, 70kVA
	Air pressure	87.0 psi	0.6 Mpa
TANK	Air volume	198 gallon/min	750 liter/min
	Hydraulic unit tank	15.9 gallon	60 liter
	Coolant tank	264.2 gallon	1,000 liter
SIZE	Lubrication unit tank	0.47 gallon	1.8 liter
	Machine dimension (L x W x H)	229.9" x 161.6" x 132.4"	5,839 mm x 4,104 mm x 3,364 mm
	Required floor space (L x W x H)	261.4" x 220.3" x 132.4"	6,639mm x 5,595mm x 3,364 mm
Machine weight	40,124 lb	18,200 kg	

*Specifications Subject to Change Without Notice



Standard Accessories

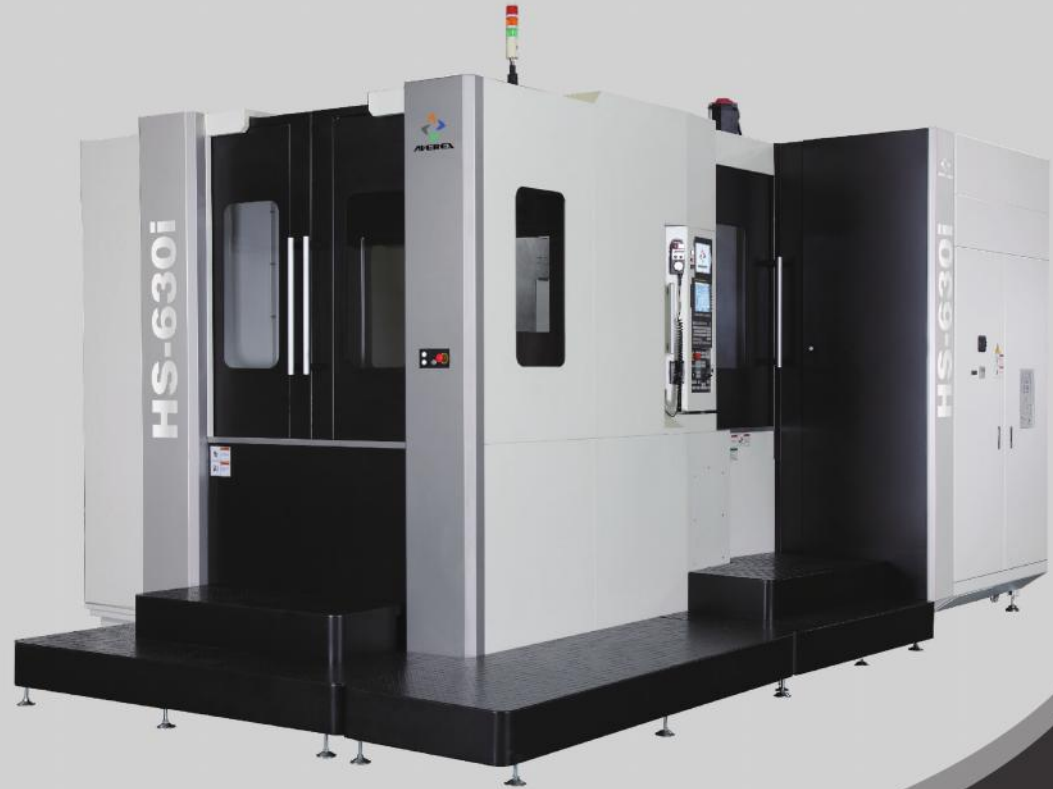
- Full chip enclosure
- Automatic power on / off
- Air through spindle (cutting)
- Spindle air seal
- Spindle air blow
- Cutting air blow
- Spindle load monitoring
- 30 Bar through spindle coolant
- Central oil-air lubrication system
- Programmable ATC speed (heavy tools)
- Flood coolant system
- Guide-way cover
- Chiller for spindle and X/Y/Z axes
- Sealed electric cabinet
- Heat exchange for electric cabinet
- Multi-language display
- Safety door
- Leveling blocks and screws
- Oil skimmer
- 3-color machine status indicator
- Prepped for 70 bar CTS
- Fluorescent lamps
- Maintenance tools
- Manuals
- Chip augers
- iPad with video camera
- Floating ball type level detection for coolant tank
- Manual Guide i

Optional Accessories

- 6 pallet APC
- Chip conveyor
- Workpiece measurement
- Tool length measurement
- Laser tool measurement
- Linear scale (X/Y/Z)
- Tool shank
- Pull Stud
- A/C cooler for electric cabinet
- Oil mist collector
- Energy-saving function
- Broken tool detection
- Rotary wiper
- Hydraulic clamping system for fixtures (overhead-arm type)
- EN ISO 13849-1:2008 compliance certificate

HS-630i

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HS-630i Standard Features

- Large Travels: X 1,050mm Y 900mm Z 1,020mm
- Large Work Envelope: Φ 1,000mm x 1,300mm
- AVEREX-FANUC MPro III
- 60 Tool Automatic Tool Changer (ATC) (2 Sec. T-T Change)
- Standard 10,000 rpm Big-Plus® 60 HP/ 600 Nm High Spindle Speed
Optional 6,000 rpm Big-Plus® 74 HP/ 1,200 Nm High Spindle Torque
- 30 Bar Through Spindle Coolant
- AICC II Contour Control with 200 Block Lock Ahead
- 50m/min Rapid Traverse
- 0.7G/1.4G/0.9G(X/Y/Z) Acceleration and Deceleration
- THK® Roller Guide Ways
- TSUBAKI® Through Ballscrews Coolant
- Standard 1° Index Table
Optional Full 4th Axis Rotary Table (0.001°)
Optional Tsudakoma® Full 4th Axis Rotary Table (0.001°)
- Thermal Compensation (Chilled Spindle and Through Ballscrews Coolant System)
- Automatic Machine Power Up and Shut Down
- Pressurized Oil and Air Lubricated for the Spindle
- Pressurized Oil Lubricated for Roller Guide Ways and Ballscrews
- Stepped Style Casting One Piece with Heavy Ribbed Base
- Air Cutting Through Spindle
- Automatic Pallet Wash System (overhead)
- Spindle Load Monitoring
- Floating Ball Type Level Detection for Coolant Tank
- Manual Guide i



Easy Operator's Panel

One-piece Machine Base



Standard 30 Bar CTS and
Optional Roller Type Chip Conveyor

Powerful Spindle



10,000 RPM / 60 HP / 600 Nm Max. Spindle Output

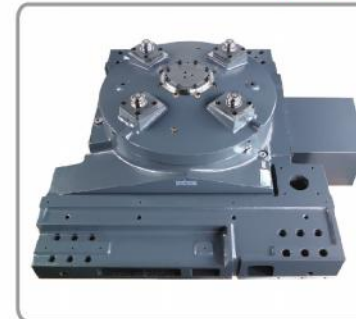


6,000 RPM / 74 HP / 1,200 Nm Max. Spindle Output

AVEREX-FANUC MPro III



Automatic Pallet Changer (APC)

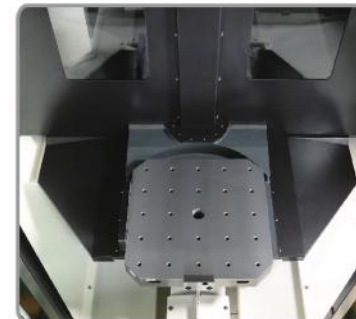


Full 4th Rotary Table (Standard 1° / Optional 0.001°)

Automatic Tool Changer (ATC)



60 Tools Magazine



15 Sec. APC Change



2 Sec. T-T Change