Standard Features

- AVEREX-FANUC MPro I Controller with Value Packaged Features
- One-piece Stepped Machine Base with Heavy Ribbed
- Three Points Machine Leveling
- 100% Hand-scraping for Geometry Accuracy and Rigidity
- BBT Dual Surface Contact Spindle
- 1° Index Table (Optional 0.001° Full Rotary Table)
- THK® Roller Guide Ways
- TSUBAKI® Ballscrews
- Thermal Compensation (Chilled Spindle)
- Pressurized Oil-Air Lubrication Spindle, Ballscrews and Guide Ways
- Mechanical Lock Pallet Clamping System with Air Seal Detection
- Overhead Automatic Pallet Wash System
- 30 Bar Through Spindle Coolant, Prepared for Optional 70 Bar
- Automatic Machine Power On/Off and Warm-up within 7 days

Standard Controller Features

- 10.4" Color LCD • 1280 meter Part Program Memory • HRV-III^{+} Servo Drives • JERK Control
- AICC II Nano Control with 200 Blocks Look Ahead • Ethernet and CF/USB Device • Manual Guide 0i
- Multi-language Display • High Speed Skip • Rigid Tapping • Canned Cycle • Helical Interpolation
- Circular Interpolation • Custom Macro B • Custom Macros-Common Variables #600-#999
- Tool Life Management • 1000 Registerable Programs • 48 Pairs Workpiece Coordinate Offsets
- Tool Offset G45 to G48 • 400 Pairs Tool Offsets • Tool Offset Memory C
- Programmable Data Input G10 • Coordinate System Rotation • Polar Coordinate Command
- Scaling • Program Restart • Manual Handle Interruption • Programmable Mirror Image
- Programmable Spindle Tool Load Monitoring • Programmable ATC Speed
- Programmable Tool Magazine Speed

Standard Accessories

- Full Chip Enclosure • High Quality 3-axes Telescopic Way Covers • Safety Doors
- Dual Chip Augers • Spindle Air Seal • Air Cutting through Spindle
- Spindle Air Blow (ATC) • Air Cutting Blow • Sealed Electric Cabinet
- Heat Exchanger for Electric Cabinet • Oil Skimmer • Coolant Level Detection
- 3-color Machine Status Indicator • Fluorescent Lamps at Operation and Loading Station
- Leveling Blocks and Screws • Maintenance Tools • Manuals

Optional Accessories

- AVEREX-FANUC MPro III Controller • CAT/DIN/HSK Tooling System • Linear Scales (X/Y/Z/B)
- 6 Pallets APC • Matrix Tool Magazine • Pallets Pool • Chip Conveyor and Chips Cart
- Rear Side Chips Disposal (HS-540 550 series machines) • Hydraulic Overhead Arms for Fixtures
- Hydraulic Pallets Though for Fixtures • 4+1 Axis Machining
- Automatic Pallet Indexing at Loading Zone • Single Pallet (HS-540 550 series machines)
- Safety Light Curtain • Chiller for Coolant Tank
- A/C for Heat Exchanger of E-cabinet • Workpiece Measurement • Tool Measurement
- Tool Breakage Detection • Orbital Boring Function • Oil Mist Collector • Window Spinner
- Energy-saving Function • Tool Shanks and Pull Studs • CE Certified EN ISO 13849-1

AVEREX®
The CNC Professionals

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AVEREX®
The CNC Professionals

Ultimate High Speed Horizontal Machining Center

HS-450 Series

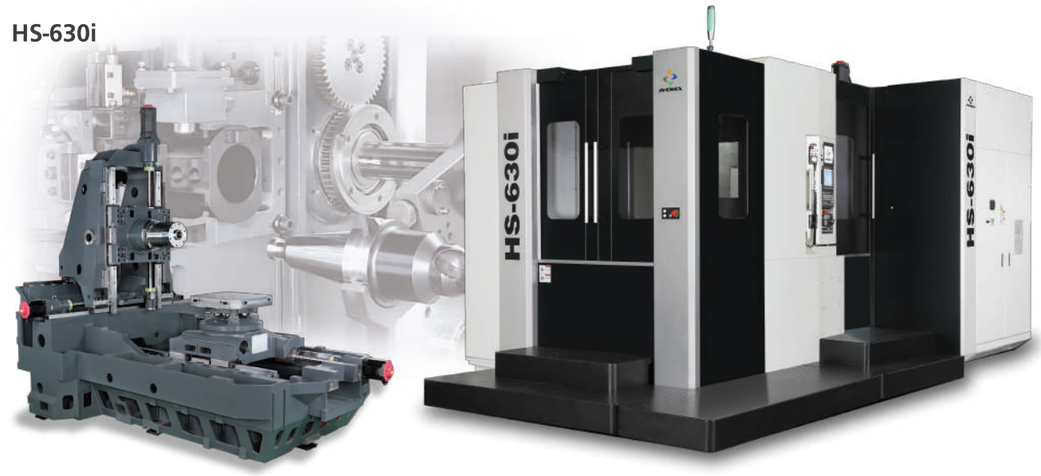
6APC

	HS-450i	HS-450k
Controller (OP)	AVEREX-FANUC MPro Ⅰ (AVEREX-FANUC MPro Ⅲ)	
Spindle Taper/Pull-stud (OP)	BBT 40 / JIS 40P (CAT 40, DIN69871-40 / DIN69872-40, HSK 63A)	
Spindle Speed (OP)	37 ~ 15,000 rpm (12,000 rpm, 20,000 rpm)	
Max. Spindle Power/Torque	37 kW / 249 Nm [50 hp / 184 lb-ft]	
X/Y/Z-axis Travel	640 / 610 / 680 mm [25.2" / 24.0" / 26.8"]	
Axis Rapid Feed/Acceleration	60,000 mm/min / 1G [2,362 ipm / 1G]	
Axis Positioning A/ Repeatability R	0.005 / 0.0028 mm [0.00019" / 0.00011"]	
Max. Work Envelope	Ø 785 x 1,000 mm [Ø30.9" x 39.4"]	
Table Size (OP)	400 x 400 mm (500 x 500 mm) [15.7" x 15.7" (19.7" x 19.7")]	
Min. Table Indexing Degree (OP)	0.001°	1° (0.001°)
Table Rotating Speed	33.3 rpm	
Number of Pallets (OP)	2 (6)	
Tool Magazine Capacity (OP)	80T (120T, 220T)	40T (60T, 80T)
Machine Weight	11,645 kg [25,672 lb]	11,450 kg [25,243 lb]
Machine Dimension	4,730 x 2,660 x 2,600 mm [186.2" x 104.7" x 102.4"]	4,730 x 2,540 x 2,600 mm [186.2" x 100.0" x 102.4"]

HS-540/550 Series

	HS-540i GTS	HS-540k	HS-550i GTS	HS-550k
Controller (OP)	AVEREX-FANUC MPro Ⅰ (AVEREX-FANUC MPro Ⅲ)			
Spindle Taper/Pull-stud (OP)	BBT 40 / JIS 40P (CAT 40, DIN69871-40 / DIN69872-40, HSK 63A)		BBT 50 / JIS 50P (CAT 50, DIN69871-50 / DIN69872-50, HSK 100A)	
Spindle Speed (OP)	37 ~ 15,000 rpm (12,000 rpm, 20,000 rpm)		25 ~ 10,000 rpm	
Max. Spindle Power/Torque	37 kW / 249 Nm [50 hp / 184 lb-ft]		30 kW / 568 Nm [41 hp / 419 lb-ft]	
X/Y/Z-axis Travel	800 / 800 / 800 mm [31.5" / 31.5" / 31.5"]			
Axis Rapid Feed/Acceleration	74,000 mm/min / 1G [2,913 ipm / 1G]	60,000 mm/min / 1G [2,362 ipm / 1G]	74,000 mm/min / 1G [2,913 ipm / 1G]	60,000 mm/min / 1G [2,362 ipm / 1G]
Axis Positioning A/ Repeatability R	0.005 / 0.0028 mm [0.00019" / 0.00011"]			
Max. Work Envelope	Ø 800 x 1,000 mm [Ø31.5" x 39.4"]			
Table Size (OP)	500 x 500 mm (400 x 400 mm) [19.7" x 19.7" (15.7" x 15.7")]			
Min. Table Indexing Degree (OP)	0.001°	1° (0.001°)	0.001°	1° (0.001°)
Table Rotating Speed	66.6 rpm	33.3 rpm	66.6 rpm	33.3 rpm
Number of Pallets (OP)	2 (6)			
Tool Magazine Capacity (OP)	80T (120T, 220T)	40T (60T, 80T)	60T (80T, 100T, 120T)	
Machine Weight	13,190 kg [29,079 lb]	12,520 kg [27,602 lb]	11,700 kg [25,794 lb] (Not Include Tool Magazine) 15,000 kg [33,069 lb] (Include Tool Magazine)	
Machine Dimension	4,931 x 2,680 x 2,706 mm [194.1" x 105.5" x 106.5"]	4,931 x 2,628 x 2,706 mm [194.1" x 103.5" x 106.5"]	4,931 x 3,086 x 2,942 mm [194.1" x 121.5" x 115.8"]	

HS-630i



	HS-630i
Controller (OP)	AVEREX-FANUC MPro Ⅰ (AVEREX-FANUC MPro Ⅲ)
Spindle Taper/Pull-stud (OP)	BBT 50 / JIS 50P (CAT 50, DIN69871-50 / DIN69872-50, HSK 100A)
Spindle Speed (OP)	20 ~10,000 rpm (8,000 rpm)
Max. Spindle Power/Torque	45 kW / 600 Nm [61 hp / 443 lb-ft]
X/Y/Z-axis Travel (OP)	1,050 / 900 / 1,020 mm (1,050 / 880 / 1,020 mm) [41.3" / 35.4" / 40.2" (41.3" / 34.6" / 40.2")]
Axis Rapid Feed/Acceleration	50,000 mm/min / X 0.7G / Y 1.0G / Z 0.9G [1969 ipm / X 0.7G / Y 1.0G / Z 0.9G]
Axis Positioning A/ Repeatability R	0.007 / 0.004 mm [0.00028" / 0.00016"]
Max. Work Envelope	Ø 1,000 x 1,300 mm [Ø39.4" x 51.2"]
Table Size	630 x 630 mm [24.8" x 24.8"]
Min. Table Indexing Degree (OP)	1° (0.001°)
Table Rotating Speed (OP)	16.6 rpm (22.2 rpm)
Number of Pallets (OP)	2 (6)
Tool Magazine Capacity (OP)	60T (120T)
Machine Weight	18,200 kg [40,124 lb]
Machine Dimension	5,888 × 4,105 × 3,364 mm [231.8" x 161.6" x 132.4"]