

## HS-450j with AVEREX-FANUC MProI SPECIFICATIONS

	DESCRIPTIONS	IMPERIAL	METRIC
<b>TRAVEL</b>	X-axis, Y-axis, Z-axis Spindle center to pallet surface Spindle nose to pallet center Pallet top height (from the floor)	25.2", 24.0", 26.8" 2.0" - 26.0" 3.9" - 30.7" 43.3"	640 mm, 610 mm, 680 mm 50 - 660 mm 100 - 780 mm 1,100 mm
<b>TABLE</b>	Table size ( 2pallets) Workpiece max. size Max. payload Configuration Min. indexing degree Indexing speed Pallet damping system Pallet damping force B-axis clamping torque	15.7" × 15.7" 19.7" × 19.7" Optional Ø29.5" × 39.4" for 2APC 1,100 lb M16x25L P=3.1" (P=3.9" for 500 mm pallet) 1" 1.1 sec./90 degrees Mechanical Lock 2,203 lb × 4 cones 2,582 lb-ft	400 mm × 400 mm 500 mm × 500 mm Optional Ø750 mm × 1000 mm for 2APC 500 kg M16x25L P=80mm (P=100mm for 500 mm pallet) 1" 1.1 sec./90 degrees Mechanical Lock 9.8 kN × 4 cones 3,500Nm
<b>SPINDLE</b>	Spindle speed Spindle rated torque Spindle acceleration / declaration Spindle taper Through spindle coolant	40 - 10,000 rpm / 40 - 15,000 rpm (Optional) 126 lb-ft (S3-15%) 87 lb-ft (30 min.) 3.2 sec (0-15K rpm) / 3.3 sec (15K-0 rpm) ISO 7/24 Taper NT No. 40 435 psi	40 - 10,000 min <sup>-1</sup> /40 - 15,000 min <sup>-1</sup> (Optional) 171 Nm (S3-15%) 118 Nm (30 min.) 3.2 sec (0-15K min <sup>-1</sup> ) / 3.3 sec (15K-0 min <sup>-1</sup> ) ISO 7/24 Taper NT No. 40 3.0Mpa
<b>FEED</b>	Rapid feed(X/Y/Z) Cutting feed(X/Y/Z) Table rotating speed Guide ways (X/Y/Z) Acceleration(X/Y/Z) Ballscrews size	2,362 ipm 787.4 ipm 33.3 rpm Roller ways 1 G+ Ø1,574"	60,000 mm/min 20,000 mm/min 33.3 min <sup>-1</sup> Roller ways 1 G+ Ø40 mm
<b>ATC</b>	Type of tool shank Type of pull-stud Number of tools Max. tool diameter (Adjacent pots full / empty) Max. tool length Max. tool weight Tool selection system Tool to tool Chip to chip	CAT-40 / BBT-40 (Optional) CAT-40 / JIS (Optional) 40 / Optional 60 Ø3.07" / Ø5.91" 15.7" 17.6 lb Random 1.2 sec. (2.1 : Heavy tool programmable) 3.4 sec. (4.4 : Heavy tool programmable)	CAT-40 / BBT-40 (Optional) CAT-40 / JIS (Optional) 40 / Optional 60 Ø78 mm / Ø150 mm 400 mm 8 kg Random 1.2 sec. (2.1 : Heavy tool programmable) 3.4 sec. (4.4 : Heavy tool programmable)
<b>APC</b>	Number of pallets Pallet change system APC exchange time	2 Rotation 7 sec.	2 Rotation 7 sec.
<b>MOTOR</b>	Spindle motor Feed axes motors (X/Y/Z/B) Lubrication pump motor Spindle coolant pump Chips flush (base) coolant pump Through spindle coolant pump Overhead shower flush coolant pump Hydraulic pump	30 / 20 hp 6.0 / 7.3 / 6.0 / 3.6 hp 0.024 hp 1.7 hp 2.1 hp 3 hp 0.8 hp , 0.8 hp 3.0 hp	22 / 15 kW 4.5 / 5.5 / 4.5 / 2.7 kW 18 W 1,270 W 1,580 W 2,240 W 600 W , 600 W 2.23 kW
<b>SUPPLY</b>	Electric voltage Electric power supply Air pressure Air volume	200 - 230 volt 45 kVA 87.0 psi 132 gal/min	200 - 230 volt 45 kVA 0.6 Mpa 500 liter/min
<b>TANK</b>	Hydraulic unit tank Coolant tank Lubrication unit tank	15.9 gallon 145.3 gallon 0.47 gallon	60 liter 550 liter 1.8 liter
<b>SIZE</b>	Machine dimension (L × W × H) Required floor space (L × W × H) Machine weight	186.2" × 105.3" × 101.6" 225.8" × 150.5" × 101.6" 24,079 lb	4,730 × 2,675 × 2,581 mm 5,375 × 3,823 × 2,581 mm 10,945 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
- Sealed electric cabinet
- Heat exchange for electric cabinet
- Multi-language display
- Safety door
- Leveling blocks and screws
- Chip augers
- 3-color machine status indicator
- Prepped for 1,000 psi CTS
- Fluorescent lamps
- Maintenance tools
- Manuals
- Floating ball type level detection for coolant tank

### Optional Accessories

- Full 4th axis rotary table 0.001"
- 60T tool magazine
- Chip conveyor
- 500 mm × 500 mm pallet
- Workpiece measurement
- Tool measurement
- Laser tool measurement
- Linear scale
- Energy-saving function for automatic power on/off
- Hydraulic clamping system for fixtures (overhead-arm type)
- Tool shank
- Pull stud
- A/C cooler for electric cabinet
- Oil mist collector
- Oil skimmer
- Illumination for pallet loading station
- Broken tool detection
- ENISO 13849-1:2008 compliance certificate
- Rotary wiper



**AVEREX**

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