

JE60S Horizontal Machining Center

A full-process, high-performance traveling column horizontal designed for multiple operations on prismatic parts in shops of all sizes. A "wide response" full-process spindle, high rapid traverse rates, a fast two-pallet shuttle system, and large capacity tool storage make the JE60S the preferred economical choice for profitably processing anything from free-machining aluminum to hardened D2 tool steel at both ends of the part volume production spectrum.



JE60S Machine Specifications

AXIS TRAVEL

X axis travel	23.6"
Y axis travel	23.6"
Z axis travel	24.8"
Distance from top of table to spindle nose	2.0"-25.6"
Distance from table center to spindle nose	5.9"-30.7"

FEEDRATES

Rapid traverse (X/Y/Z)	1,970 ipm
Cutting feedrate (X/Y/Z)	0-591ipm
Acceleration (X/Y/Z)-G	0.7G

THRUST

X axis	1,125 lbs.
Y axis	1,125 lbs.
Z axis	1,125 lbs.

TABLE

Table work surface	19.7" x 19.7"
Table surface design	(24) 5/8"-11UNC t
Maximum table load 1,100 lbs.	1,100 lbs.
Distance from floor to top of table	43.3"

SPINDLE

Spindle taper	CAT 40
Spindle bearing diameter	3.35"
Spindle speed range	40-13,000 rpm (2
Spindle drive type	Built in
Spindle ramp-up time	1.5 seconds
Spindle horsepower (30 min/cont)	29.5 HP/ 25 HP
Spindle torque	122 ft.lbs.
Rigid tapping (max. rpm)	4,000 rpm
Lubrication type	Oil-air
Cooling type	Oil chiller w/air

ACCURACY

Positioning (full stroke, all axis)	0.00012"
Repeatability	± 0.00004"

MOTORS

Spindle motor	AC 29.5HP
Feed motors (X/Y/Z)-YASNAC	7.7 HP

AUTOMATIC TOOL CHANGER

Tool change method	Double arm, rando
Tool shank type	directional
Tool retention knob	CAT 40
Tool storage capacity	MAS type II (60)
Tool selection type Bi-directional memory	60
Maximum tool diameter (adj. pocket empty)	Bi-directional mem
Maximum tool length	2.95" (5.71)
Maximum tool weight	13.78"
Tool change time (tool to tool)	17.64 lbs.
Tool change time (chip to chip)	1.0 sec.
	3.0 sec.

AUTOMATIC PALLET CHANGER

Pallet work surface	19.7" x 19.7"
Maximum pallet load	1100 lbs.
Shuttle clearance	26.4" dia x 29.5" high
Table surface design	(24) 5/8"-11 tapped holes
Number of pallets	2
Pallet indexing	1 degree
Indexing speed	1.2 sec. per 90 degree
Indexing accuracy	± 3 arc seconds
Pallet change method	Rotating
Pallet change time	6.0 sec.

TANK CAPACITIES

Cutting fluid	132 gal.
Hydraulic fluid	2.7 gal.
Lubrication fluid	0.6 gal.

POWER SOURCES

Electric power supply
200V AC ±10% 3-ph 50/60Hz ±2%
220V AC ±10% 3-ph 60Hz ±2%
Maximum power consumption
60 KVA

MACHINE

Weight 19,840 lbs.
Size (W x D x H) 91" x 172" x 114"

Standard Equipment

- 60 tool dual speed rate automatic tool changer
- Dual automatic pallet changer
- 500mm pallets
- 360 position (one degree) pallet index
- Spindle air curtain
- Spindle oil chiller
- Spindle flood coolant
- Coolant through the spindle (256PSI)
- Bed flush coolant system
- Ceiling shower coolant
- Manual pulse generator
- Spindle speed, feedrate and rapid traverse overrides
- RS 232-C port
- Halogen work light
- Three stage machine status stack light
- Door interlock
- Lift-up chip conveyor
- Program memory: 240 meters
- Helical interpolation
- Work coordinate expansion (48 pairs)
- Inch/ metric switchable capability
- Totally enclosed splash guard with manually operated door
- 110V AC outlet
- Standard tools for machine
- Leveling bolts and blocks

Options Available

- 20,000 RPM spindle
- HSK63A taper
- Fourth axis rotary table (360,000 positions)
- 118 tool automatic tool changer
- Part probe
- Auto tool length measurement and tool breakage detection
- Custom macro "B"
- Part program storage - 320m, 640m or 1280m
- Program restart
- Tool length measurement
- Tool life management
- Tool offset addition - 64, 99, 200, 499, or 999 pairs
- Work coordinate system expansion, 300 pairs
- Coordinate system rotation