

EV450T

ENSHU
JAPAN

A cost efficient 40 taper vertical machining center that is well balanced in speed and rigidity for every day job shop tasks. An ergonomically designed optional rotary pallet changer is available for added output in production machining.

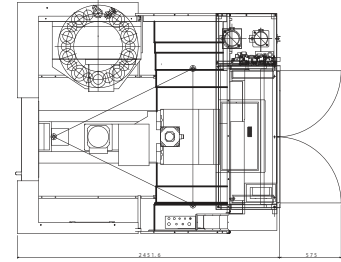
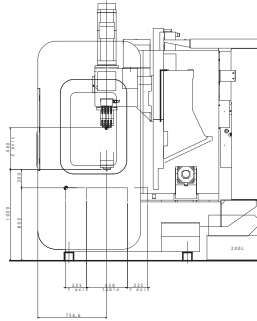
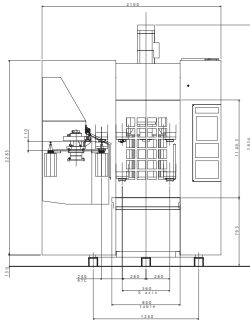


**ADVANCING THE TECHNOLOGY OF ULTRA-HIGH PERFORMANCE FOR
STAND-ALONE PRODUCTION, LEAN LINES OR AGILE MACHINING SYSTEMS**

**OUT-PERFORM
OUT-PRODUCE
OUT-LAST**

- High speed, high productivity at low cost
- Traveling column X axis with traveling table Y axis
- 10,000RPM, 25HP direct coupled spindle
- Armless 20 tool ATC with 3.4 second chip to chip
- Optional pallet changer available

EV450T MACHINE SPECIFICATIONS



AXIS TRAVEL

X Axis	22"
Y Axis	17.7"
Z Axis	18.1"
Table top to spindle centerline	7.9" ~ 26"
Table centerline to spindle face	20"

TABLE

Work surface size	31.5" x 17.7"
Maximum work load	1,100 lbs.
Table surface profile	T-slotted table (0.7" x 3)

FEEDRATES

Rapid traverse (X/Y/Z)	1,968 IPM
Cutting feedrate	0 ~ 1,968 IPM
Acceleration/Deceleration (X/Y/Z)	0.63/0.76/0.76G
Feed motors, AC Servo	7.4 HP (X/Y/Z)

SPINDLE

Spindle taper	CAT40 taper
Spindle bearing diameter	2.6" (4 Bearing)
Spindle power/type	24.8 HP/direct coupled
Spindle torque	118Nm
Spindle ramp-up time	1.76 seconds (10,000 RPM)
Rigid tapping (max. rpm)	4,000 RPM
Lubrication type	Greasepack

ACCURACY

Positioning, full stroke (X/Y/Z)	0.00015"
Repeatability	+/- 0.000039"

AUTOMATIC TOOL CHANGER

Magazine capacity	20 (30)
Tool change method	Armless
Maximum tool diameter	3.54"
with adjacent pockets empty	5.71"
Maximum tool length	11.81"
Maximum tool weight	17.6 lbs.
Tool change time (tool-tool)	2.1 seconds
Tool change time (chip-chip)	3.4 seconds

AUTOMATIC PALLET CHANGER (OPTION)

Pallet size	20.9" x 15.7"
Capacity per pallet/total	550 lbs./1,100 lbs.
Spindle nose to table surface	4.3" ~ 22.4"
Pallet surface	5/8 - 11 x 21 tapped holes
Pallet change time	4.8 seconds

MACHINE ELECTRICS

AC 200/220V ± 10%, 3 Phase, 60Hz	34 KVA
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MACHINE DIMENSIONS & WEIGHTS

L x W x H	97" x 83" x 111"
Weight	9920 lbs.

STANDARD EQUIPMENT

- Fanuc OiMD control
- Fanuc 25 HP spindle drive
- Fanuc axis servo drives
- CAT40 spindle taper
- 31.5" x 17.7" table surface
- 20 tool automatic tool changer
- 10,000 RPM direct coupled spindle
- Ceramic spindle bearings
- Spindle air curtain
- Pre-wired for coolant thru spindle
- 300L coolant tank
- Bed flush coolant
- Spindle flood coolant
- Manual pulse generator
- Spindle speed override
- Feedrate override
- Totally enclosed splash guard with manual operated doors
- Door interlock
- Inch/metric switchable capability
- Helical interpolation
- AI advanced preview control
- 1280m total program memory
- Number of programs 400
- 8.4" color LCD display
- 400 tool offsets
- Tool offset memory type C
- 48 sets of work coordinate system
- Mirror image
- Automatic tool length measurement
- Custom macro "B"
- Additional macro variables
- Coordinate rotation
- High speed skip function
- Embedded Ethernet
- Manual Guide I function

OPTIONS AVAILABLE

- BigPlus taper
- Automatic pallet changer
- 30 tool magazine
- Additional axis (4th axis)
- Lift up chip conveyor
- Spindle probe
- Broken tool detector
- Coolant thru spindle
- Tool life management
- Other options available



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