

GE460H

TAPER
40

PALLET
400

Enshu
JAPAN

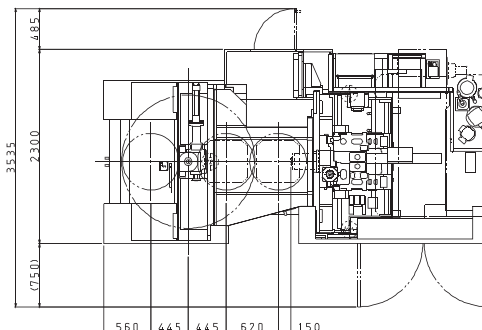
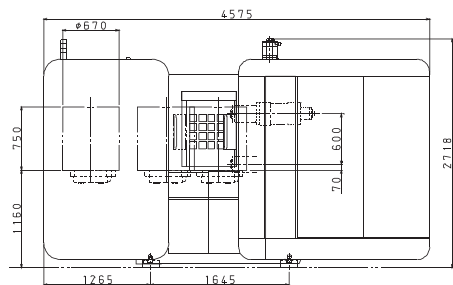
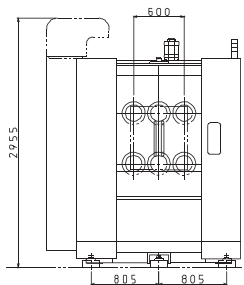


**OUT-PERFORM
OUT-PRODUCE
OUT-LAST**

Advancing the technology of ultra-high performance for stand-alone production, lean lines or agile machining systems.

- 90M/min (3,543 IPM) rapid traverse rates on X/Y/Z
- 1.0g (9.8 M/sec²) axis acceleration/deceleration on X/Y/Z
- Dual range 50 HP gearless AC spindle features ceramic bearings
- Refrigerated & temperature controlled spindle and ballscrews
- Spindle ramps to 15,000 RPM in just 1.9 seconds
- High torque 250 Nm spindle as standard
- Accuracy 0.000080", full travels on X/Y/Z, repeatability ± 0.000040"
- Automatic Tool Changer with 1.2 second tool-tool, 3.2 second chip-chip
- Rotary Automatic Pallet Changer exchanges 1,100 lbs./pallet in 7 seconds
- Large work area, compact footprint - ideal for FMS Pallet Systems
- Design for reliability - 5,000 hour mean time between failure (MTBF5000H)

GE460H MACHINE SPECIFICATIONS



AXIS TRAVEL

X Axis	23.6"
Y Axis	23.6"
Z Axis	23.6"
Table top to spindle centerline	2.75"~26.2"
Table centerline to spindle face	5.9" ~ 29.6"

FEEDRATES

Rapid traverse (X/Y/Z)	3,543 IPM
Cutting feedrate	0 ~ 3,543 IPM
Acceleration/Deceleration (X/Y/Z)	1.0g (9.8 M/sec ²)
Feed motors, AC Servo	7.4 HP (X/Y/Z)

SPINDLE

Spindle taper	BIG Plus/CAT40 interchangeably
Spindle bearing diameter	2.8" (4 Bearing)
Spindle power/type	50 HP/integral
Full power developed at	
Low Range	1,061 RPM
High Range	5,000 RPM
Spindle ramp-up time	1.9 seconds (15,000 RPM)
Rigid tapping (max. rpm)	4,000 RPM
Lubrication type	Air-oil mist, refrigerated

ACCURACY

Positioning, full stroke (X/Y/Z)	0.000080"
Repeatability	+/- 0.000040"

AUTOMATIC TOOL CHANGER

Magazine capacity	60 (118, 180)
Maximum tool diameter	2.95"
with adjacent pockets empty	6.3"
Maximum tool length	13.78"
Maximum tool weight	
Full speed	17.6 lbs.
Reduced Speed (programmable)	26.4 lbs.
Tool change time (tool-tool)	1.2 seconds
Tool change time (chip-chip)	3.2 seconds

AUTOMATIC PALLET CHANGER

Pallet size	15.7" x 15.7"
Capacity per pallet/total	1,100 lbs./2,200 lbs.
Minimum index	1° (360 positions)
Pallet index time (90° index)	1.2 seconds
Pallet change time	7.0 seconds

MACHINE ELECTRICS

AC 200/220V ± 10%, 3 Phase, 60Hz	60 KVA
----------------------------------	--------

MACHINE DIMENSIONS & WEIGHTS

L x W x H	212" x 99" x 117"
(length includes chip conveyor)	
Weight	25,200 lbs.

STANDARD EQUIPMENT

- Fanuc 31iMB control
- Fanuc 50 HP spindle drive
- Fanuc axis servo drives
- BIG Plus/CAT40 spindle taper, interchangeably
- 400 mm pallets (15.7" x 15.7")
- Rotary automatic pallet changer
- 60-tool automatic tool changer
- 15,000 RPM integral spindle
- Ceramic spindle bearings
- Full 4th axis (360,000 positions)
- High volume rolling filter chip conveyor
- Spindle air curtain
- Spindle oil chiller
- Coolant thru-spindle (256 PSI)
- Spindle flood coolant
- Bed flush coolant
- Ceiling shower coolant
- Refrigerated & temperature controlled spindle and ballscrews
- Manual pulse generator
- Spindle speed override
- Feedrate/rapid traverse override
- LED work light
- Three-stage stack light
- Totally enclosed splash guard with manual operated doors
- Door interlock
- CE spec
- Inch/metric switchable capability
- Helical interpolation
- 2MB total program memory
- Automatic corner override
- Tool offset memory type C
- 200 tool offsets
- Custom macro "B"
- Additional macro variables
- Additional registrable programs
- High speed skip

OPTIONS AVAILABLE

- HSK 63A spindle taper
- 118 & 180 tool capacity ATC
- 20,000 RPM spindle
- Spindle probe
- Broken tool detector
- Tool life management
- Additional tool offsets to 999
- Additional work coordinates to 300 sets
- Enshu die mold package
- Dataserver with fast Ethernet
- FMS pallet systems



Enshu (USA) Corporation
404 E. State Parkway
Schaumburg, IL 60173

Tel: (847) 839-8105
Fax: (847) 839-8226

www.enshuusa.com
info@enshuusa.com

ver. 42017