GANESH MACHINERY
The Edge in Cutting.

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GANESH GTD- 44 Series CNC Lathes

Swing from 44” - 55” & Center Distance from 80” - 240”

FOR YOUR HEAVY-DUTY CNC TURNING NEEDS

- **30-HP Spindle Motor (40-HP optional)**
- **6 – 420 RPM Spindle Speeds**
- **4-Automatically Selected Gear Ranges for High Torque**
- **A2-11 Spindle with a 6” Bore (9”, 10”, 12” & 15” Spindle Bores Optional)**
- **Rear Spindle Chuck Mount available to support long workpieces**
- **Extended Swing Capacity to 55” with the use of Riser Blocks**
- **Boring Bar Holder Available for back of Cross Slide**
- **Optional Tool Turrets Available (as shown above)**
- **Dual Tool Turrets Available for front & back of Cross Slide**

GTD- 44 Series MACHINE FEATURES:

MACHINE CONSTRUCTION

- Meehanite Castings, fine grain and high-density cast iron using the superior Meehanite process yields superior vibration dampening and improved surface finish and tool life, as well as greater wear resistance on the ground way surfaces of this heavy-duty CNC lathe.
- Precision C-5 double-nut ballscrews ensure accuracy in repeatability and positioning

SPINDLE

- Front and rear chuck mounts are available for “Oil-Field” type work
- 30 HP heavy-duty spindle motor for high metal removal efficiency
- Infinitely variable spindle speeds from 6 - 420 rpm in 4-automatic gear ranges
- Hardened and ground A2-11 spindle nose (A2-15 & A2-20 spindles are optional)
- Alloy Steel Hardened & Precision Ground Gears provide for smooth power transmission
- Spindle with 6” bore (9”, 10”, 12” & 15” options) is supported by oversized precision bearings
- - 6” bore - 3 bearing support, 2x NSK 32040 tapered roller bearings, & 6038 rear ball bearing
- - 9” bore – 2x NSK 32960 tapered roller bearings (reduces spindle speed to 6-292 RPM)

WAYS

- Turcite-B anti-friction coating on saddle and cross slide for improved accuracy & wear
- Automatic metered lubrication system for ballscrews and ways
- Hardened & Precision Ground Longitudinal Single-Vee Prism & Box Way for high rigidity
- Cross slide is a dovetail way design

TAILSTOCK

- Tag-Along style, manually coupled to saddle for positioning
- Manual lockdown and manual quill (hydraulic driven tailstock available)
- MT-6 quill taper, (integral bearing style and tailstock chuck style available)

FEATURES

- Automatic vertical turrets and horizontal automatic 4-way toolpost available
- Link-Belt style chip conveyor on back-side of ways included
- Inch/Metric threading, left or right hand threading, single or multiple-start threading
- Built in high-capacity coolant system
- Large Fluorescent worklight
- Heat exchanger for electrical cabinet
- Inspection Report on accuracy to CNS 94 and B7001 standards included
- Instruction Manual, Tools and Tool Box with hand tools and lube gun included

AVAILABLE WITH FRONT & REAR CHUCK MOUNTS

MACHINE SPECIFICATIONS: **GTD-44 CNC Lathe Series**

Capacity & Dimensions-

Swing over Bed	44” (1,118 mm)
Swing over Cross Slide	27.60” (700mm)
Swing thru Gap (available without gap)	55” (1400mm)
Gap Opening Width	23.43” in front of spindle face (595mm)
Distance between centers	78” - 236” available (2000 – 6000mm)
Bed Width	32” (810 mm)

Spindle Weight Capacity-

Max workpiece weight capacity (Chuck only)	6,600 lbs (3,000kgs) (9”=4,500kgs)
Max workpiece weight capacity (Chuck and Steady Rest)	15,400 lbs (7,000kgs) (9”=8,500kgs)
Max weight capacity (Chuck, Steady Rest & Tailstock)	19,800 lbs (9,000kgs) (9”=10,500kgs)

Spindle-

Spindle Motor Horsepower – up to 160” bed lengths	30 HP (22kw Fanuc), (40-HP optional)
Spindle Motor Horsepower – 200” + bed lengths	40-HP (30kw)
Spindle speeds	6-420 rpm (6-292 with A2-15 & A2-20 spindles)
Spindle speed gear ranges, automatically selected	4-gear ranges (infinitely variable speeds in each range)
Spindle Bore	6” (152mm) (Optional 9”, 10”, 12” and 15” Available)
Spindle Nose	A2-11 (Optional A2-15 / A2-20 spindle nose)
Spindle ID taper in spindle nose	MT-6

Axis-

Cross slide travel	23.62” (600mm) (varies with turret selected)
X axis Ballscrew / Servo Motor	40mm, Pitch 10mm / 4-HP (3kw) Servo motor
Z axis Ballscrew / Servo Motor	63mm, Pitch 10mm / 5.5-HP (4kw) Servo motor
X and Z axis Rapid Feed Rate	196”/min (5000 mm/min)
X and Z axis Cutting Feed Rate	118” / min (3000 mm/min)
Minimum input unit	0.0001” (0.001mm = 40 millionths of an inch)

Tool Turret - (Optional)

Turret Tool Stations	8-Station tool turret with any mix of ID & OD tools
OD Tool Size	32mm X 32mm (1.25” X 1.25”)
ID Tool Holder Bore (4-ID toolholders included)	50mm (1.97”) (63mm optional)

Tailstock

Engraved with inch / metric quill graduations

Quill diameter	7.87” (200mm)
Quill stroke	11.81” (300 mm) with 2-speed quill gearing
Quill taper	MT-6 Morse Taper #6
Body movement	Carried by saddle – manual lockdown
Optional Hydraulic Tailstock Available	Carried by saddle – hydraulic quill & bed lockdown

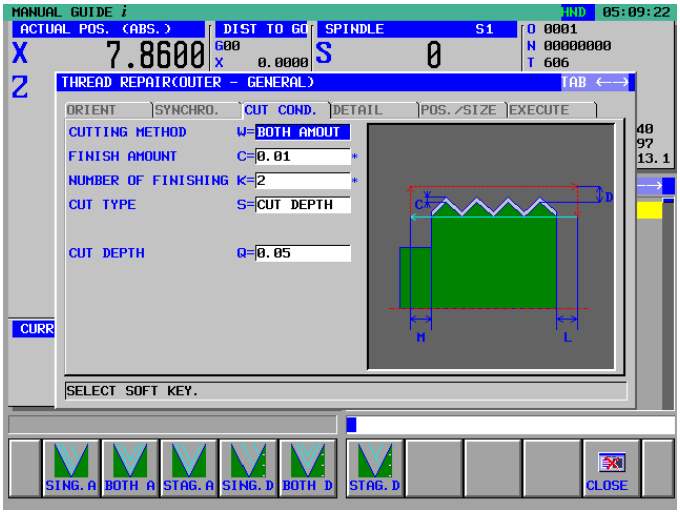
Specifications-

Coolant system	1.75-HP (1.275kw) coolant pump
Electrical needs - Fanuc 0i-TD, Drives & Motors	220vac ±5%, 3-Ph, 60-Hz
Warranty – 1-Year Machine	2-Year FANUC control and drives

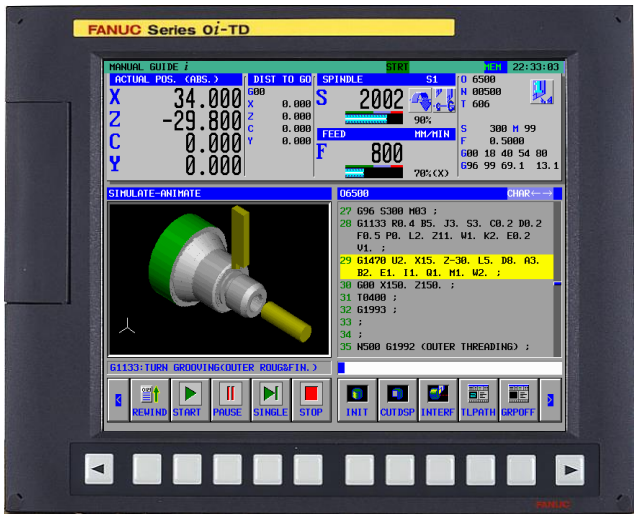
The Ganesh GTD- 44 Series CNC machines are manufactured in Our Certified ISO 9001 Production Facility in TAIWAN.

FANUC 0i-TD CNC CONTROL

The **FANUC 0i-TD** all digital control and drive package provides exceptional value and reliability. The control features a clear 10.4” LCD screen that pivots out for easy operator viewing, and can catalog 400 part program numbers and features an internal 2GB solid-state Data Server with 512K RAM memory reserved for part programs and features embedded high-speed Ethernet capability and AICC II and includes DB-25 RS-232 serial interface, RJ-45 Ethernet interface USB, and PC MCIA CF memory card connections for program transfer. Manual Guide-i conversational programming provides fast & efficient intuitive menu driven shop floor programming and includes a Thread Repair Cycle. A MPG handwheel is also provided. There is a heat exchanger on the electrical cabinet to control the ambient temperature of the electronic hardware.



Thread Repair Cycle

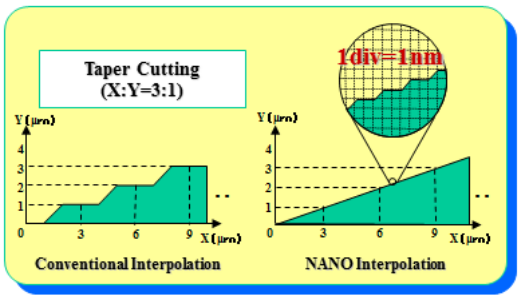


Manual Guide-i

Smooth machined surface achieved in combination with high-speed, high-precise Servo control

Feature

- **Position command to servo control is calculated in much finer resolution than input unit (1nm for input unit of 1μm).**
- **Machine movement becomes very smooth resulting in high accuracy of finished surface.**
- **More smooth machined surface is obtained for combined use with αi servo.**



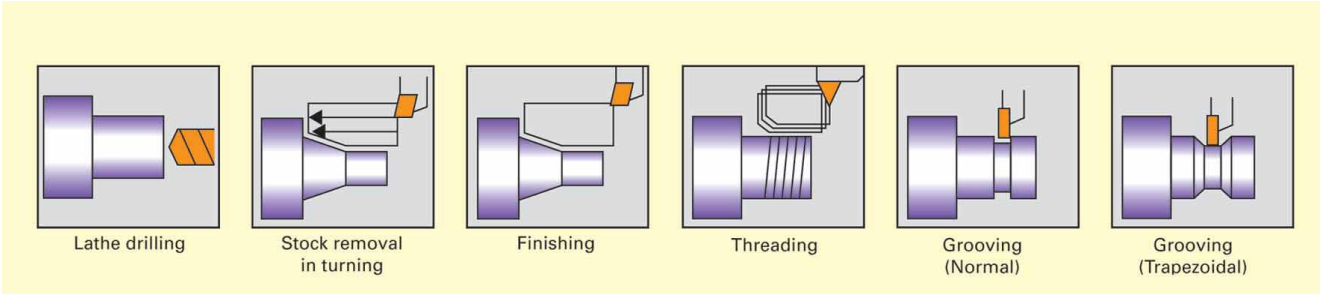
The Series 0i-MODEL TD achieves the highest precision possible with nanometer resolution standard throughout the CNC system - from internal calculations and stored values, through to the interpolator, on to the drive system, and the position feedback devices.

Nano interpolation and fast, high resolution 16-million count-per-revolution feedback devices combine to provide a superior surface finish quality when contouring. This minimizes the need for secondary operations, reducing delivery times and part cost.

The 0i-TD CNC includes many high performance features and functions to make you more productive and help you achieve the highest accuracy possible. The graphics below show some of the capability of the FANUC 0i-TD CNC Control.

Advanced Graphical Canned Cycles:

For easy lathe programming, MANUAL GUIDE-i features numerous canned cycles. The operator simply fills the required fields on the screen and the program is created automatically for the ultimate shop floor efficiency.



Productivity Advantages:

- Compatibility with previous versions Series 0 and 0i-Models A, B and C
- Make use of existing part programs
- Thread Repair Cycle
- Stored Pitch error compensation for each axis
- 400 Program storage with 512K of user memory
- Background editing
- Simple programming and operation
- Minimal training required
- Operator friendly graphic display for part program verification
- Multi-Language Support
- Extended help functions and alarm/operation history
- 64-Tool Offset Pairs
- Tool Life Management to maximize machine utilization
- Cutter Compensation for direct input from drawings
- Ethernet RJ-45, RS-232, USB interfaces
- Standard Nano-Interpolation and advanced functions like and AI Contour Control (AICC-1) provide enhanced surface finish results and exacting feature definition

The suite of Canned Cycles and Custom Macro-B further simplify part programming.