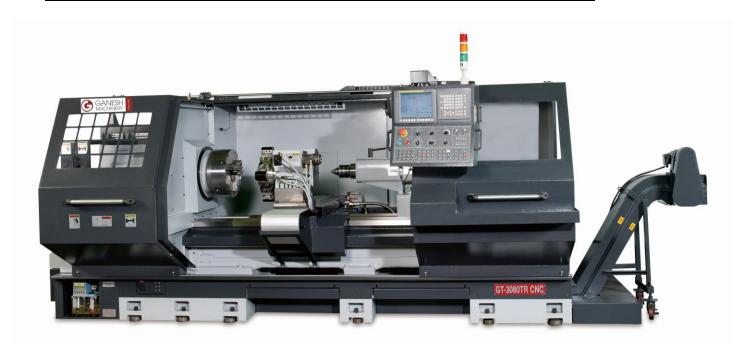


20869 Plummer St. Chatsworth, CA 91311 Toll Free: 888-542-6374 (US only) Phone: 818-349-9166 I Fax: 818-349-7286 www.ganeshmachinery.com

GANESH GTW-30 CNC Lathe

30" Swing & 60" - 160" Bed Lengths

Front & Rear A2-11 Chuck Mounts Included



- A2-11 Spindle w/6-5/8" Bore, 6-1000 RPM Standard
- A2-15 Spindle w/<u>10" Bore</u>, 18 600 RPM <u>Optional</u>
- 2-Gear Ranges for Increased Cutting Torque
- 8-Station Tool Turret Any combination of ID/OD tools
- Dual-Turrets (Front & Rear of cross slide) Available
- Bore-Bar Holder Available for rear of cross slide
- Available in 60", 80", 120" & 160" Center Distances
- FANUC 0i-TD Control and FANUC Axis & Spindle Drives

A Proven Winner in Pipe Threading Applications!

STANDARD GTW-30 CNC "Oil-Field" MACHINE FEATURES:

The GTW-30 is a universal CNC lathe for chuck, shaft, and bar machining applications.

- 8-Position Hydraulic Vertical Turret with any combination of ID / OD tools (4-ID holders supplied)
- Front & Rear A2-11 spindle nose for mounting chucks on both the front & rear of the spindle
- Heavy-Duty NSK 32044 Tapered roller bearings (10" bore has 32064 Tapered roller bearings)
- Inch/Metric threading, left or right-hand threading, single or multiple-start threading
- Built-in leveling ledge to level machine low to ground for enhanced bed stability and rigidity.
- Automatic Metered Lubrication System to provide oil to ballscrews and ways
- Inspection Report on accuracy to CNS 94 and B7001 standards included
- Instruction Manual, Tools and Tool Box with hand tools and lube gun included
- Air conditioner to cool electrical enclosure
- The electrical control box and coolant system are equipped with electro-magnetic contactors and overload relay protection devices to prevent motors from burnout and to ensure safe operation.

SPINDLE



- Spindle is supported by 3 over-sized precision bearings
- Front & rear spindle mounts feature hardened and ground spindle noses
- Infinitely variable speeds, in 2-gear ranges for high torque
- Steel Alloy Hardened & Ground Gears provide smooth power transmission

BEDWAYS

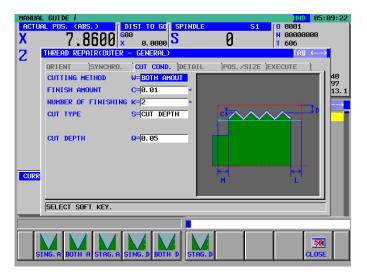
- Hardened & Precision Ground Double-Vee / Double-Flat Ways provide high rigidity
- Turcite-B anti-friction saddle and cross slide coating for improved accuracy & wear

OPERATOR CONVENIENCE

- Tri-color machine condition display lamp
- Chuck guard with Micro-Switch provided for enhanced operator safety
- Built in high-capacity coolant system
- Large Fluorescent worklight included
- Halogen spot worklight is provided to illuminate areas requiring detailed lighting
- Roll-in / roll-out coolant tank makes coolant management much easier
- The tailstock features E-Z air-lift positioning assistance and the oversized Ø5" quill fits MT#6 centers for extra strength and equipped with a tang-drive and a drift-slot for easy removal of centers and taper shank drills. The quill features inch and metric scales.

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.





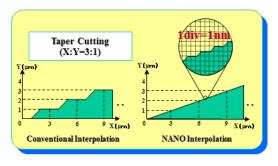
Thread Repair Cycle

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.



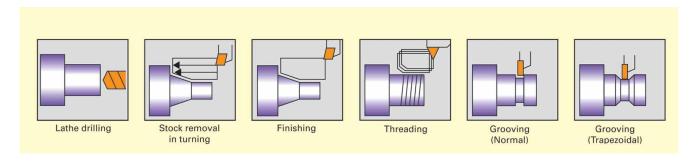
The Series 0i-MODEL TD achieves the highest precision possible with nanometer resolution standard throughout the CNC system - from internal calculations and stored values, through to the interpolator, on to the drive system, and the position feedback devices.

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
- Spindle Jog Pushbutton
- 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 Al Contour Control (AICC-1) provide enhanced surface finish results and exacting feature definition

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

GTW-30 Series CNC Lathe Machine Specifications

Capacity & Dimensions-

Swing over Bed	30"	(760 mm)
Swing over Cross Slide	19"	(480 mm)
Center Height	15"	(380 mm)
Bed width of ways	18"	(460 mm)
Bed Casting Height	15.75"	(400 mm)

Spindle-

Spindle Motor Horsepower (Fanuc 18.5Kw)	30-HP Peak (25-HP 30-min. rated)	
Spindle speeds -	6-1,000 RPM	
Spindle Gear Ranges - 2-automatically selected gear ranges	Low 6-600 rpm / High 10-1000 rpm	
Spindle Bore (10" bore optional)	6.69" (170 mm)	
Spindle Nose (Front & Rear) / Bearing	A2-11 / Taper Roller Bearing	
Spindle Torque for 6-5/8" bore – low gear / high gear	1180 / 346 ft. lbs. (1600 / 470 Nm)	
Big-Bore Spindle Option – Bore Size	10" (255mm) A2-15 spindle	
Big-Bore Spindle Speeds	18-600 rpm in 2-ranges)	
Big-Bore Spindle Gear Ranges - 2-automatically selected gear ranges	Low 18-186 rpm / High 60-600 rpm	
Big-Bore Spindle Torque for 10" bore – low gear / high gear	1475 / 442 ft. lbs. (2000 / 600 Nm)	
Workpiece weight limit when held in chuck	1,100 lbs. (500kgs)	
Workpiece weight limit when held by chuck and tailstock	2,200 lbs. (1,000kgs)	
Workpiece weight limit when held by chuck, steady rest & tailstock	4,400 lbs. (2,000kgs)	

Axis-

Rapid Traverse Feedrate X&Z	394 IPM	(10m/min)
X-Axis Cross slide travel	19-5/8"	(500 mm)
Z-Axis Travel (listed with each bed length)	See each mad	hine on next page
X-Axis Ball screw Diameter / Servo Motor Power	1.25" (32 mm)	/ 3.5-HP (2.5kw)
Z-Axis Ballscrew Diameter / Servo Motor Power	2" (50 mm)	/ 4.0-HP (2.9kw)
X-Axis Thrust	65 ft. lbs.	(900 Kgf)
Z-Axis Thrust	98 ft. lbs.	(1350 Kgf)
Cross slide dimensions WxL	39" x 10" (100	0mm x 258mm)
Minimum input unit	0.0001" (0.001	mm = 40 millionths")

Tool Turret-

Tool Turret-	Hydraulic type / LS-200R
Tool stations – any combination of ID/OD tooling /Index time	8-stations / 0.4 second index
O.D. Tooling (additional I.D. & O.D. toolholders in stock)	1" tools w/8-tool clamps provided
I.D. Tooling (40mm when specified for metric users)	4-ID (1.5" bore) holders provided

Tailstock-Air-Assist Manual Positioning - Quill engraved with inch/metric quill graduations

Quill diameter	Ø5.0"	(125 mm)
Quill stroke (manual quill advance, hydraulic optional)	8'"	(200 mm)
Quill taper	MT-6	Morse Taper # 6

Electrical / Hydraulic / Coolant Systems

Power Requirements – FANUC 01-1D control, motors & drives	30kVA, 220vac ±5%,
Hydraulic Motor Power	2-H.P.
Hydraulic Pressure	500 PSI / Mobil #32 oil
Coolant Pump	3/4-HP

The Ganesh GTW-30 machines are manufactured in our Certified ISO 9001 Production Facility in Taiwan.