

# OmniTurn

*Fast... Precise... Affordable...*

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## GT-Jr Turning Center



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- **Gang-Tooled slant bed**
  - **5hp spindle w/5C nose**
  - **Air-actuated collet closer**
  - **Flood-coolant system**
  - **Open for Fast Setup**
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Gang-tooled for fastest tool changes.

75° slant-bed lets chips fall away quickly.

12" X-Axis travel; 9" Z-Axis travel.

Highest quality ground ball-screws and linear guides for precision and reliability.

Closed-loop servo system provides .0001" accuracy with .00005" resolution.

5hp spindle (C-Axis positioning optional)

4000rpm (5000 & 6000rpm optional)

Barfeed ready.

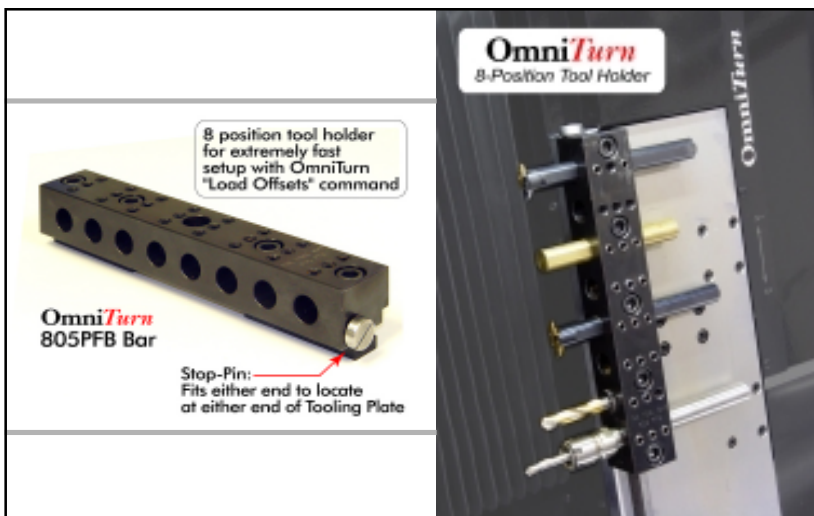
# OmniTurn GT-Jr Turning Center

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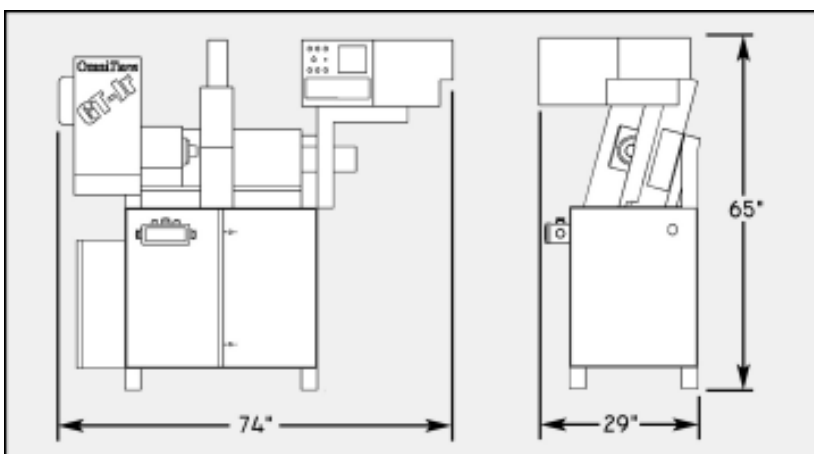
## Gang-Tooling is fast!

### Gang-tooling is fast tool-to-tool! Change tools in less than 1/2 second.

Gang-tooling is fast for repeat setups! OmniTurn's "Save Offsets" feature lets you setup a complex repeat job in just minutes if you've saved your tooling in this 805PFB holder. Just re-locate the holder on the tooling plate and load your part program with offsets and you're ready to run parts in minutes. No need to re-set all your tooling. The locating pin insures that the holder is back in place, and the original offsets load into the OmniTurn with the program.



The OmniTurn 805PFB (pictured above) is an 8-station tool-bar that accepts 5/8" tooling on 1.1" centers. Stop-pin fits either end so bar can be located on either side of OmniTurn tooling plate. OmniTurn "Save Offsets" feature instantly retrieves offsets when program is loaded, so repeat jobs can be re-set in minutes. Shown at right on OmniTurn GT table note that steep 75° angle allows chips to fall away quickly into chip-pan. **\$195.**



### OmniTurn GT-Jr Dimensions

Height	65"
Width	74"
Depth	29"

## Specifications:

### Capacities

Workholding (opt.)	4" Chuck Max
Max. Cutting Diameter	6"
Max. Bar Diameter	1.06"
Tooling Plate	6" x 14" with 3/8" T-Slot

### Spindle

Max Speed	4,000rpm (6000 opt.)
Max Rating	5 hp
Spindle Nose	5C w/4° camlock
Drawtube Bore	1.125"

### Construction

Ways	Precision Linear Guides
Ball Screws	Precision-ground, Zero Backlash
Base Billet	MJ7 Composite Casting
Headstock	Mehanite
Coolant Pump	1/8hp 5gmp (1/4hp 20gmp opt.)

### Travels & Feedrates

X-Axis	12"
Z-Axis	9"
Resolution of Slide Travel	0.00005"
Repeatability of Slide Travel	0.0001"
Threading	240tpi to 0.5tpi (2"pitch)
Axes Thrust	500lbs cont. 750lbs int.
Max Rapids	300ipm
Max Cutting	300ipm

### General

Machine Weight	1,200lbs
Air Required	3 scfm @ 60 - 100 psi
Electrical	208 - 240 VAC, 1 or 3 phase @ 20A
Floor Space	29" x 74" (65" high)

# OmniTurn GT-Jr Specifications

## GENERAL SPECIFICATIONS:

Travel in X: 12"  
Travel in Y: 9"  
Tooling Height: 3/8, 1/2, 5/8  
Tooling Plate Size: 6" x 14"  
Tooling Type: Gang type (quick change)  
Repeatability of Slide Travel: .0001" (one tenth)  
Resolution of Slide Travel: .00005" (50 millionths)  
Accuracy of Slide Travel: .0001" (one tenth)  
CNC Control: OmniTurn PC Based  
Rapid Travel: 300 ipm  
Feed Rate: .00005"/rev to 300ipm  
Threading: 240tpi to 0.5tpi (2" pitch; useful for multi-start)  
Thrust: 500lb continuous; 750lb intermittent  
Axis Motors: Closed Loop Servo w/Velocity Feedback for stiffness  
Acceleration: .04sec 0 to 300ipm

## CONSTRUCTION:

Linear Ways: Precision Linear Guides  
Ball Screws: Precision ground, Zero Backlash  
Base Billet: MJ7 Composite Casting  
Headstock: Cast Iron  
Frame Finish: Heavy Duty Powder Coat  
Coolant Pump: 1/8hp (1/4hp optional)

## SPINDLE:

Cartridge Type: Class 7 Angular Contact  
Spindle Taper, ID: 5C .000025" TIR  
Spindle Taper, OD: Plain, 4° Cam Lock, Threaded (options)  
Collet Actuator: Pneumatic

## SPINDLE DRIVE, STANDARD:

Spindle RPM : 100 - 4000rpm (5000rpm, 6000rpm optional)  
Power: 5hp  
RPM Programmable: RPM and CSF

## SPINDLE DRIVE, C-AXIS:

Spindle RPM: 10 - 4000rpm (5000rpm, 6000rpm optional)  
Power: 4.5hp  
RPM Programmable: RPM, CSF, C (abs), C (incr), C/X, C/Z, C/X/Z  
Spindle Positioning Resolution: .02°

## REQUIREMENTS:

Electrical: 208 - 240 VAC 1 or 3 phase 20A  
Air: Compressed Air 3.0 cfm @ 60 - 100 psi CONTROL  
Floor Space: 24" x 36" (72" high)

## CONTROL SPECIFICATIONS:

Servo update time:.001 second ♦ Servo loop gain: 4"/min/mv ♦ Uses standard EIA G codes: ♦ G00, G01, G02, G03, G04, G10, G33, G34, G35, G36, G40, G41, G42, G70, G71, G73, G74, G75, G76, G77, G78, G81, G90, G91, G96, G97, M00, M01, M02, M03, M04, M05, M08/M09, M12/M13, M30, M97, M98, M99 ♦ On screen parts counter: counts up or down ♦ 9 Mbyte program storage (Approx. 9000 programs) ♦ Tool Offsets can be saved with program: ♦ 32 tool offsets/program; 32 secondary offsets/program; 32 tool nose radii/program ♦ Full screen text editor ♦ Solid State Hard Drive for CNC and primary program storage ♦ Storage of unlimited number of programs via additional floppy disks Joy stick for movement in Jog mode for setup ♦ Jog speeds: 100 ipm, 10 ipm, 1 ipm ♦ Jog increments: .00005" / .001" / .01" / .1" / 1" ♦ Feed rate over ride: 10% to 100% ♦ Spindle speed over ride: 0-120% ♦ Program Input: 1.44mb Floppy, Keyboard, RS-232, Network ♦ Diameter or Radius Programming ♦ Standard off-line programming software