

# BenchTurn 7000 CNC Turning Center



BenchTurn 7000 shown with optional jog pendant and optional pneumatic door opener. PC not included.

Over the past three decades, intelitek has established itself as the leader in affordable CNC machines, with over 13,000 CNC machines installed in industry and education across the world.

The BenchTurn 7000 is a versatile PC-based benchtop CNC turning center that enables you to deliver robust instruction in computer numerical control and advanced manufacturing for your students.

The BenchTurn 7000 comes equipped with 2-axis stepper motors, ball screws, a variable speed brushless spindle motor, limit/home switches, and an MT3 taper spindle with MT2 taper tailstock. This benchtop CNC system requires no assembly, arriving at your facility ready to run on an ethernet port on a standard PC, and fits comfortably into any classroom without sacrificing features. Like larger industrial

machines, the BenchTurn 7000 uses EIA, ISO, and Fanuc-compatible G&M code programs to cut parts in a variety of materials.

intelitek's CNCBase® control software is easy to learn. The user-friendly control software supports linear, circular, and helical interpolation, multiple tool programming, and canned cycles. This standard software gives users the ability to write and edit standard G&M code programs and geographically view the machining operation on-screen before cutting.

With available supplements like CNCMotion® full 3-D virtual simulation software, Fanuc™ control software, Fanuc™ hardware emulator and intelitek's LearnMate® e-learning curriculum specific to the machine, the BenchTurn 7000 is the perfect classroom solution, with exceptional ease-of-use, safety features and reliability.

## Standard machine features

Ethernet-based control  
Brushless spindle motor  
Full enclosure with automatic safety door lock  
Tailstock  
Automatic diagnostics and power cut off protection

PC-based CNC software  
Coolant-ready  
Jog pendant-ready  
Robotic integration-ready with 6 inputs, 6 outputs  
No assembly required

## Specifications

Swing over bed	7.87"	(200 mm)
Swing over cross slide	3.94"	(100 mm)
Max distance between centers	14.17"	(360 mm)
Bed width	3.94"	(100 mm)
Max travel: Z axis	9.84"	(250 mm)
Max travel: X axis	5.90"	(150 mm)
X axis motor	192 oz-in 1.35 N-m	stepper motor
Z axis motor	192 oz-in 1.35 N-m	stepper motor
Rapid feed rate	79 ipm	(2000 mm/min)
Feed rate	20 ipm	(500 mm/min)
Automatic tool position	4	
Tool post angle	360 deg.	
Tailstock taper	MT2	
Tailstock travel	1.97"	(50 mm)
Position accuracy	0.0006"	(0.015 mm)
Position repeatability	0.0004"	(0.01 mm)
Spindle taper	MT3	
Spindle speed	100-3000 RPM	
Spindle motor power	0.67 HP / 500 W	
Machine size	39.38" x 30.75" x 22.25"	(1000x780x565 mm)
Machine weight	310 lbs	(140 Kg)
Shipping size	47.25" x 37.00" x 30.25"	(1200x940x770 mm)
Shipping weight	397 lbs	(180 Kg)

## Included accessories

4" 3-jaw chuck with key  
4-station automatic tool turret  
HSS cutter  
One shot lubrication system  
Internal work light

## Optional accessories

4" (100mm) 4 jaw chuck (independent)  
0.394" x 0.394" (10mm x 10mm) TiN coated cutter 7 piece set  
TiN coated replacement tip for 0.394" (10mm) cutters  
Jog pendant  
Coolant system  
4" air chuck  
Pneumatic door opener  
Advanced turning package including:

- Steady rest
- Follow rest
- Rolling center

MT2 0.5" (13mm) tailstock Jacobs chuck  
3-drawer mobile workbench



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# BENCHTURN 7000 CNC TURNING CENTER

## OPTIONAL ACCESSORIES

### Coolant system



### Jog pendant - handwheel



### Fanuc control panel



### 4" (100mm) 4 jaw chuck (independent)



### 0.394" X 0.394" (10mm x 10mm) tin coated cutter 7 piece set



### Tin coated replacement tip for 0.394" (10mm) cutters



### Advanced turning package including:

- Steady rest
- Follow rest
- Rolling center



### Mobile workbench, 3-drawer



### Tailstock accessories

#### ■ MT2 0.5" (13mm) tailstock Jacobs chuck



#### ■ Tailstock extender MT2 13 mm tailstock chuck



### Pneumatic accessories

#### ■ 4" Air chuck



#### ■ Pneumatic door opener



### CNC curriculum and projects



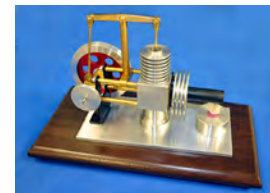
#### ■ BenchTurn 7000 LearnMate module LAB includes

- BenchTurn 7000
- Jog pendant
- Machinists kit
- Stock package

#### ■ BenchTurn 7000 LearnMate module VIRTUAL

- 15-hour LearnMate e-learning content
- CNCMotion for BenchTurn 7000 virtual simulation software

#### ■ Stirling Engine Project kit:



- Materials for milling and turning
- Fully assembled

#### ■ Cannon Project Kit:



- Materials for milling and turning
- Fully assembled

Affiliated with:



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