TensileMill

TensileTurn CNC

Classic Upgrade

- ACCURATE AND REPEATABLE RESULTS
- NO SURFACE GRINDER NEEDED
- SMALL FOOTPRINT
- PERFECT FOR UNTRAINED CNC MACHINIST
- SUPER USER-FRIENDLY
- FREE PROOF OF CONCEPT

DESCRIPTION

The TensileTurn CNC Classic Upgrade Model is a robust, compact CNC lathe designed to prepare accurate round tensile specimens and support consistent, high quality tensile test results. The system features our TensileSoft 2.0 touchscreen interface and enhanced 15 inch controller, allowing any operator, with or without machining experience, to quickly prepare specimens to your required dimensions. By selecting a common specimen size from our built in standards library (ASTM, ISO, DIN, etc.) or entering custom values using the touchscreen keypad, the TensileTurn CNC Classic Upgrade Model is ready to machine materials up to 55 HRC. With efficient workholding and the ability to process multiple stacked samples, it helps reduce lab delays and supports accurate, repeatable specimen preparation in minutes.

2220 Meridian Blvd., Suite #AF937, Minden, NV, 89423, USA
11407 SW Amu St., Tualatin, OR, 97062, USA
4071 L.B. Mcleod Rd. Ste D PMB 34, Orlando, FL, 32811, USA
847 Sumpter Road, Belleville, MI, 48111, USA
918 16 Ave NW, Calgary, AB, T2M 0K3, Canada

+1 877 672 2622
+1 775 981 9041
sales@tensilemillcnc.com
www.tensilemillcnc.com

TensileTurn CNC - Classic Upgrade

ROUND Tensile Specimen Preparation Machine

GENERAL

The TensileTurn CNC Classic Upgrade Model is a robust, compact CNC lathe designed to prepare accurate round tensile specimens and support consistent, high quality tensile test results. The system features our TensileSoft 2.0 touchscreen interface and enhanced 15 inch controller, allowing any operator, with or without machining experience, to quickly prepare specimens to your required dimensions. By selecting a common specimen size from our built in standards library (ASTM, ISO, DIN, etc.) or entering custom values using the touchscreen keypad, the TensileTurn CNC Classic Upgrade Model is ready to machine materials up to 55 HRC. With efficient workholding and the ability to process multiple stacked samples, it helps reduce lab delays and supports accurate, repeatable specimen preparation in minutes.

TensileTurn CNC Classic Upgrade Model is a compact CNC lathe designed for accurate round tensile specimen preparation. The system uses TensileSoft 2.0 with a 15 inch touchscreen controller, so operators, even without machining experience, can prepare specimens by choosing a standard from the built in library such as ASTM, ISO, or DIN, or by entering custom dimensions on the touchscreen keypad. The machine is also equipped with FANUC software for CNC control and programming.

The Classic Upgrade model supports CNC operations such as turning, facing, knurling, sanding, drilling, and cutting. It can prepare multiple specimen types including standard round tensile specimens, sub size specimens, threaded tensile specimens, button head tensile bars, fatigue specimens, and other round testing specimens. Operators can load round, square, or irregular stock, and the system is intended to produce consistent specimen dimensions for tensile testing.

The system is positioned as a lab focused solution that helps avoid delays linked to using general machining centers. With quick setup and simple operation, it is intended to allow personnel to prepare high quality round tensile specimens for testing in minutes.

- **ACCURATE AND REPEATABLE RESULTS**
- **NO SURFACE GRINDER NEEDED**
- **SMALL FOOTPRINT**
- **PERFECT FOR UNTRAINED CNC MACHINIST**
- **SUPER USER-FRIENDLY**
- **FREE PROOF OF CONCEPT**

FEATURES

- 2.2 kW heavy duty motor
- 3 jaw universal manual chuck
- Tailstock center
- 25 L coolant tank capacity
- 16 inch long and 2 inch diameter capacity

CONTROLLER

Our easy to use touchscreen controller is equipped with our complete FANUC software. Our control systems include 64 GB of storage, 4 GB of RAM, WiFi, Ethernet, USB ports, Macro B programming, 254 tool offsets, 126 work offsets, helical interpolation, drilling canned cycles, scaling and mirroring, advanced trajectory planning, and dual mode cutter compensation. Along with the tensile milling software interface, FANUC also allows the operator to access the MACH4 Industrial CNC Software used for professional CNC control functions. Our FANUC software is constantly having new features developed, and every TensileMill CNC system includes updates at no additional cost.

TECHNICAL SPECIFICATIONS

TENSILETURN CNC		
Total connection	3.5KW	
Main motor power	2.2KW	
Coolant pump power	40W	
CAPACITY	**METRIC**	**EMPERIAL**
Swing over bed	Ø300mm	Ø11.8"
Swing over cross slide	Ø200mm	Ø7.8"
Center width	600mm	23.6"
Center height	140mm	5.5"
SPINDLE	**METRIC**	**EMPERIAL**
RPM	300	
Spindle nose	1:04	
Spindle taper	MT4	
Spindle bore	Ø26mm	Ø1.02"
Spindle speed range	On request	On request
Lathe chuck	Ø125mm	Ø4.92"
TOOL CHANGER	**METRIC**	**EMPERIAL**
Type	electric	
Numbers of tool position	4	
Section of tool (Max)	12*12mm	0.47x0.47"

TRAVEL	METRIC	EMPERIAL
X axis	180mm	7.1"
Z axis	465mm	18.3"
X axis rapid speed	6000mm/min	236"/min
Z axis rapid speed	8000mm/min	315"/min
ACCURACY	**METRIC**	**EMPERIAL**
Position accuracy	X±0.05mm Z±0.03mm	X±0.002" Z±0.001"
Repeat position accuracy	X±0.02mm Z±0.010mm	X±0.0008" Z±0.0004"
TAILSTOCK	**METRIC**	**EMPERIAL**
Tailstock taper	MT2	
Tailstock sleeve diameter	Ø30mm	Ø1.18"
Tailstock sleeve travel	80mm	3.15"
POWER		
Input Voltage	220 V 3ph	
DIMENSIONS	**METRIC**	**EMPERIAL**
Overall dimension (L×W×H)	1390 x 706 x 1830mm	625" x 27.79" x 68.90"
Packing size (L×W×H)	1829 x 940 x 1840mm	72" x 37.2" x 72.45"
Net weight/Cross weight	850KG	1873LB
Tank capacity	25L	
Connection Requirements	Pneumatic	

UNIQUE SOLUTION FOR ROUND TENSILE SPECIMEN CNC PREPARATION