

CINCINNATI MACHINES

MT/MTX Series

Turret-Head Knee-Type Vertical Milling Machines



Cincinnati Machines MT/MTX Series Turret Head Vertical Knee Type Milling Machines are designed and manufactured from the ground up to provide many years of reliable and dependable service. Available in a variety of sizes and configurations and with a large compliment of available optional accessories, you are sure to find an MT or MTX milling machine to meet your needs.

CONSTRUCTION FEATURES

- *Heavy-duty meehanite castings
- *Double anti-backlash feed nuts
- *Double slide locks
- *Hardened and ground table work surfaces
- *Hardened and ground ways with Turcite
- *Class 7 precision spindle bearings
- *Chrome plated and ground quill
- *Metered valve lubrication system
- *Dynamically balanced VS pulley
- *Rubber way covers

HEAVY-DUTY MEEHANITE CASTINGS



3MT AND 4MT MILLING MACHINES

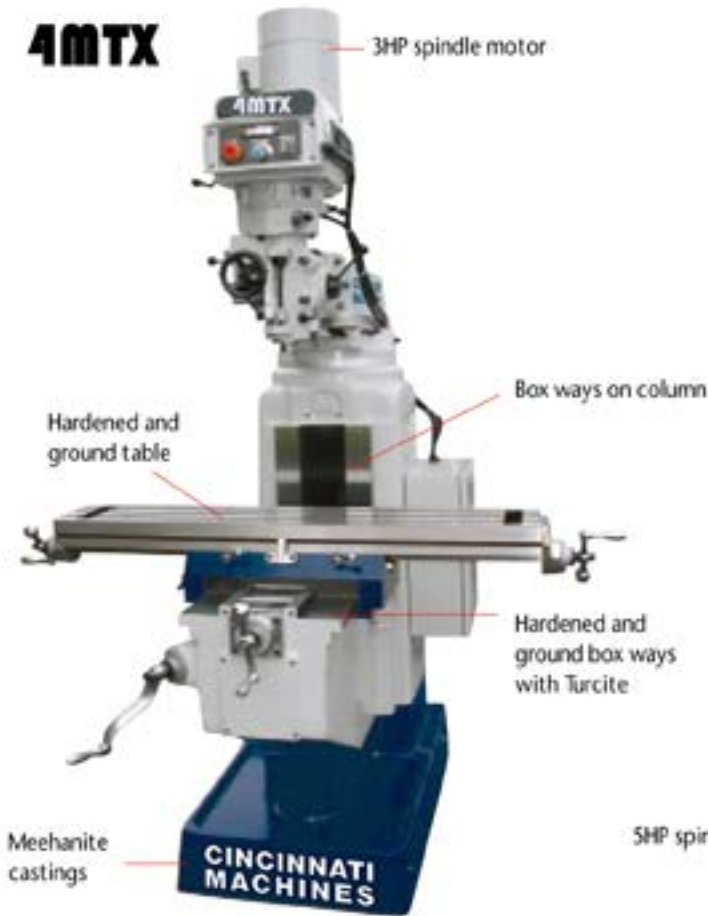


Precision ground and dynamically balanced pulleys for smooth, quiet operation and long belt life



4MTX AND 5MTX MILLING MACHINES

4MTX



Heavy duty knee with box ways provides the rigidity needed for superb support over the full range of travels

5MTX top RPM of 4200 is standard



Extra heavy duty 5MTX mill head without knuckle



4MTX and 5MTX tables are capable of supporting loads up to 1,500 lbs.



SPECIAL FEATURES



One piece construction is superior to our competitor's 2 piece



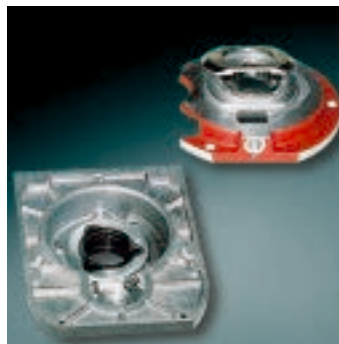
Our design uses a splined pinion shaft which is much stronger and more rigid than the keyed shaft



Our standard spring type micrometer adjusting nut provides quick and easy movement for setting spindle depth



Gaskets are used to prevent grease and oil leakage



One pieces quill housing ensures precise alignment, eliminates vibration, and prevents premature bearing failure



Dynamically balanced pulley with special bronze key attached with 2 screws prevents premature breakage



Our special power down feed parts are so strong, they can be used over 3,000 RPM spindle speeds. Our 1 piece cluster gear is superior to the much used 3 piece design

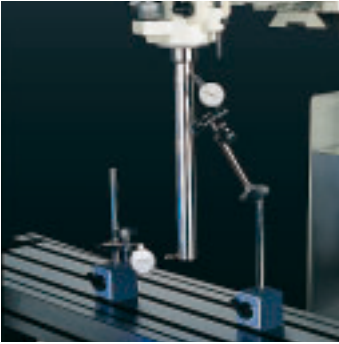


The splined shaft is much stronger and provides greater safety than the keyed shaft



Willis 3HP inverter drive milling head - EV

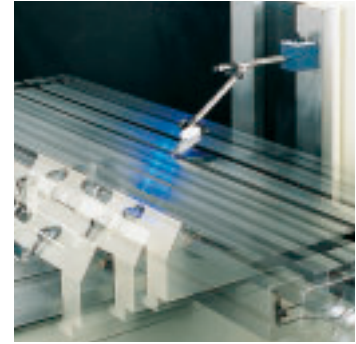
INSPECTION



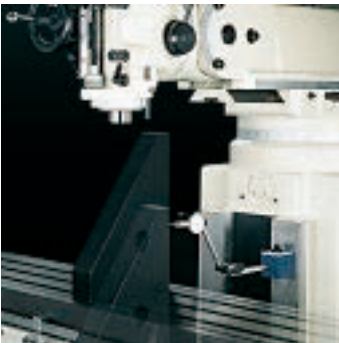
Spindle Bore Runout less than 0.0004"



Spindle Running Noise Measuring less than 73 db at 1 meter



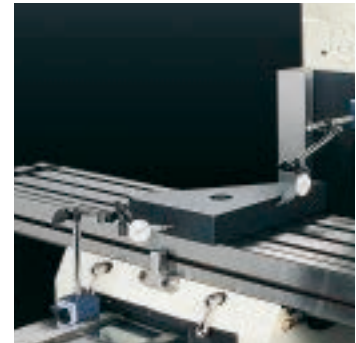
Parallelism of Table Surface to Table Cross Travel Movement less than 0.0008" per 12" of travel



Squareness of Table Surface to Knee Travel less than 0.0008" per 12" of travel



Squareness of Table Surface to Quill Travel less than 0.0008" per 5" of quill travel



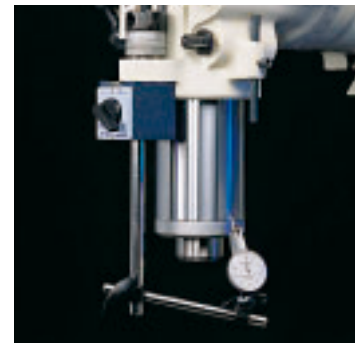
Measuring of Squareness of longitudinal Travel to Cross Travel less than 0.0008" per 20" of travel



Parallelism of Table Surface to Table Longitudinal Movement less than 0.0008" per 20" of travel



Parallelism of Table Surface to Ram Cross Transverse Movement less than 0.0008" per 12" of travel



Stiffness of Head and Quill Combination

MACHINE SPECIFICATIONS

Specifications	3MT	4MT	4MTX	5MTX
Table dimensions	49" x 9"	50" x 10"	50" x 10"	50" x 12"
Travels-longitudinal/ cross (manual)	36" x 13"	36" x 16"	34" x 17"	32" x 17"
Vertical knee travel	16"	16"	18"	18"
T-slots (3)	5/8"	5/8"	5/8"	5/8"(4)
Ram travel	17"	24"	21"	24"
Ram swivel	360°	360°	360°	360°
Quill diameter	3-3/8"	3-3/8"	3-3/8"	4-1/8"
Quill travel	5"	5"	5"	5"
Spindle motor	3 HP	3 HP	3 HP	5 HP
Spindle speeds (variable)	60-4200	60-4200	60-4200	60-4200
Spindle taper	R8	R8 or 30	R8 or 30	40 taper
Quill power feed rates (inches per revolution)	0.00032" 0.0017" 0.0053"	0.0032" 0.0017" 0.0053"	0.0032" 0.0017" 0.0053"	0.0032" 0.0017" 0.0053"
Head tilting-left to right (degrees)	90-0-90	90-0-90	90-0-90	90-0-90
Head tilting-front to back (degrees)	45-0-45	45-0-45	45-0-45	FIXED
Spindle nose to to table-min./max.	3"-18"	2"-18"	3"-20"	2"-20"
Center of spindle to column face-min./max.	3"-20"	3"-27"	3"-24"	6"-28"
Ground way surface width	2-1/2"	3-1/2"	4-1/8"	4-1/8"
Saddle width	18"	21"	21"	21"
Knee width	12"	14"	15-1/2"	15-1/2"
Knee height	17"	18"	20-1/4"	20-1/4"
Longitudinal power feed	optional	optional	optional	optional
Longitudinal rapid traverse				
Longitudinal feed motor	optional	optional	optional	optional
Table rising motor	optional	optional	optional	optional
Coolant pump	1/8 HP(opt.)	1/8 HP(opt.)	1/8 HP(opt.)	1/8 HP(opt.)
Net weight	2400 lbs.	2800 lbs.	3300 lbs.	3700 lbs.
Maximum work piece weight	750 lbs.	750 lbs.	1100 lbs.	1100 lbs.
Machine dimensions	61" x 64" x 82"	68" x 65" x 85"	68" x 65" x 92"	68" x 65" x 92"

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

**CINCINNATI
MACHINES**

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