



VERTICAL MILLS TMV/TMV-I

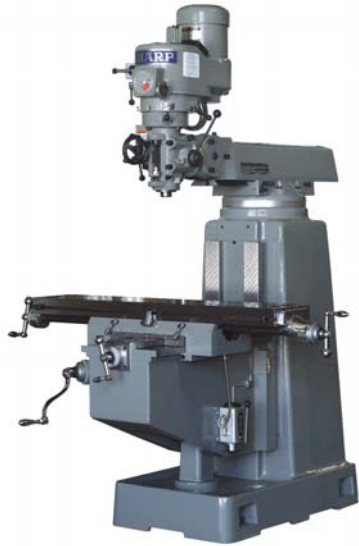
Now Available With Digital Variable Speed



Sharp tools always cut better.

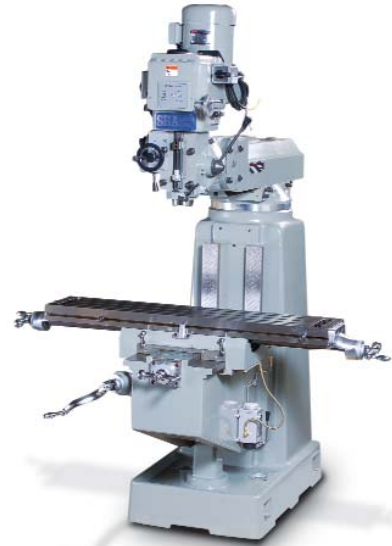
Heavy Duty Vertical Milling Machine

MODEL TMV



10" x 50" Table, 16.3" x 35" Travel, 3 hp R-8 Spindle Motor,
60 - 4,500 rpm Variable Speed Drive

MODEL TMV-I



10" x 50" Table, 16.3" x 39 x 15.3" Travel, 5 hp NT 40
Spindle Motor, 60 - 4,500 rpm Variable Speed Drive

Heavy Duty CNC Control Vertical Milling Machine

MODEL TMV/MP3



Acu-rite Millpower CNC Control
10" x 50" Table, 15.5" x 31" Travel, 3 hp Spindle
Motor, 60 - 4,500 rpm Variable Speed Drive

Also available:
TMV/MP 2-Axes Millpower
10" x 50" Table, 15.5" x 31" Travel
TMV-I/MP-2

MODEL TMV/ANILAM 3



Anilam 3-Axes 3000M
10" x 50" Table, 15.5" x 31" Travel, 3 hp Spindle
Motor, 60 - 4,500 rpm Variable Speed Drive

Also available:
TMV/ALM 2-Axes 3000M
10" x 50" Table, 15.5" x 31" Travel
TMV-I/ALM-2

Setting the standard in the machine tool industry

Double Nut Design

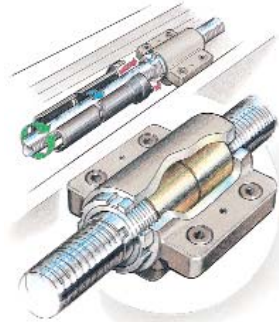
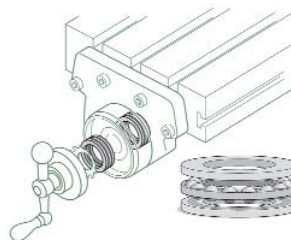


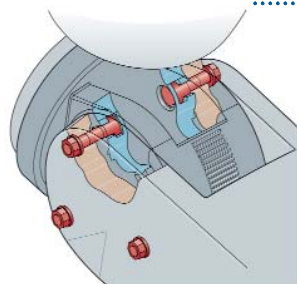
Table and saddle backlash is controlled by a unique double-nut design that constantly keeps the feed screw in contact with a pair of bronze nuts. Using a custom tool supplied with the mill, the feed nuts are adjusted to control backlash and held tight with a retaining nut and locking ring.

Thrust Bearings



The TMV's table and saddle are mounted with thrust bearings that pre-load the feed screw, eliminating end play for precisely controlled lateral movement.

New Knuckle-Head Design



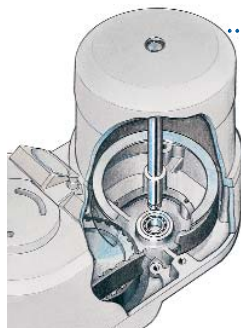
This patented knuckle-head design prevents the head from slipping. Sharp mills have a knuckle which uses 6 bolts, 3 per side, fitted into circular T-slots with nuts securing them from the outside. This method locks the head into place more securely resulting in better accuracy and performance.

High-Output Fans



A pair of high output fans keep the TMV's powerful 3 hp head cool. One of the features of heat dispersion is it allows the LMV to work demanding jobs for extended periods without damaging the motor, belts, or bearings.

Roller Bearing



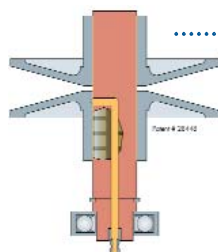
The TMV is the only mill in its class that uses a roller bearing for the lower support of the motor shaft. It ensures proper loading, support, and alignment for quiet, accurate operation at any speed. It also prevents the shaft from being distorted by the tension of the belt over years of use.

Digital Variable Speed (DVS) (option)



Digital Variable Speed (DVS) head (optional) allows digital display of spindle speed using inverter drive system. This also offers high reliability due to less moving parts, easy to operate knob-turning speed control, equipped with dynamic brake and low voltage safety control.

Motor Shaft



Our chrome plated, self-lubricating motor shaft has an oil channel in the center that is fed by a grease fitting on the lower end.

Meehanite Casting



Finite element analysis is utilized in pouring Meehanite castings to provide static and dynamic stiffness, accuracy, thermal stability, and superior vibration dampening for high performance machining.

Standard Equipment

- ▶ One-Shot Lube System
- ▶ Front and Rear Rubber Way Covers
- ▶ Tool Kit
- ▶ Wired 220v or 440v

Options

- ▶ Digital Variable Speed
- ▶ 440v Transformer
- ▶ Work Light
- ▶ 6" Vise w/ swivel base
- ▶ R-8 Collet (set of 11)
Only on TMV
- ▶ Digital Readout Systems (DRO)
- ▶ Riser Block
- ▶ Coolant System
- ▶ Power Draw Bar
- ▶ Clamping Kit
- ▶ Auto Lube System
- ▶ Chip Pan

FEATURES / SPECIFICATIONS

TMV and TMV-I Features Only

- ▶ Patented 6 T-Bolt Knuckle Design for better performance
- ▶ Hardened & Ground Box Ways (on column & knee) for maximum rigidity
- ▶ Double Nut Backlash Eliminator
- ▶ Motor Shaft End Supported by Bearing Cap
- ▶ Precision Ground Gibs
- ▶ Internal Lubricated Vari-Disc Design
- ▶ Dual Fan Head Cooling System
- ▶ Self-Lubricating Motor Shaft
- ▶ Meehanite Casting
- ▶ ABEC-7 Super Precision Spindle Bearings

MODEL	TMV	TMV-I	TMV/MP3	TMV/ANILAM3
Capacity				
▶ Working Surface	10" x 50"		10" x 50"	
▶ T-slot Number, size	3, 5/8"		3, 5/8"	
▶ Table Travel, x axis	35"	39"	31"	
▶ Saddle Travel, y axis	16.3"		16.5"	
▶ Ram Travel	18.5"	18.5"	18.5"	
▶ Quill Travel, z axis	5"		5"	
▶ Knee Travel	15.3"		15.3"	
▶ Spindle to column (min-max)inches	9.8-28.3	9.8-28.3	9.8-28.3	
▶ Spindle to nose to table	1.6" - 16.9"	1.6" - 16.9"	1.6" - 16.9"	
Spindle				
▶ Motor	3 hp	5 hp	3 hp	
▶ Wiring Voltage	220/440v		220/440v	
▶ Taper	R-8	NT 40	R-8	
▶ Speed (vari-speed) rpm	60-4500		60-4500	
▶ Quill Feed (IPR)	.0015, .003, .005		.0015, .003, .005	
▶ Head Swivel	360 deg.		360 deg.	
▶ Accuracy TIR	.0002"	.0002"	.0002" TIR	
▶ Head tilt, right-to-left	90 deg.		90 deg.	
▶ Head Tilt, up-and-down	45 deg.		45 deg.	
General				
▶ Floor Area	70" x 75"	84" x 78"	70" x 75"	
▶ Machine Height	88"	92.4"	88"	
▶ Machine Net Weight (approx. lbs.)	3000	3300	3700	3700



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