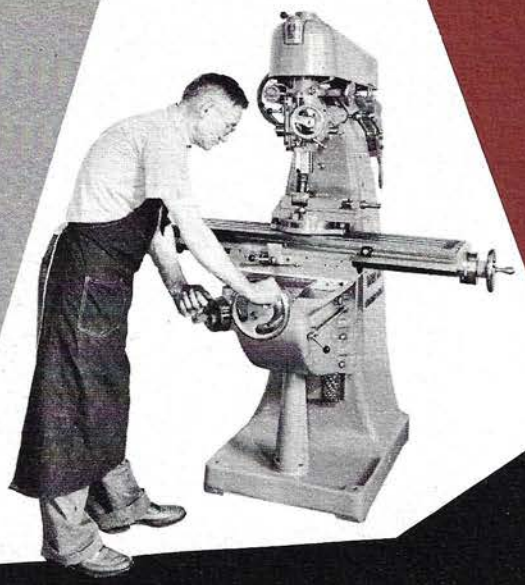


U★S★VERTICAL MILLING MACHINE

- Built to new high standards of rigidity and accuracy
- Choice of hand or power feed head and table
- Economical to buy, operate and maintain
- Convenient controls for operational ease
- Extra knee, saddle, table and quill travel
- Unsurpassed versatility for vertical and angular milling and boring

U★S★VERTICAL MILLING

. . . versatile...rigid...accurate

BALANCED RIGIDITY

MASSIVE CONSTRUCTION

PRECISION DESIGN

CONVENIENT OPERATION

CERTIFIED * * ACCURACY

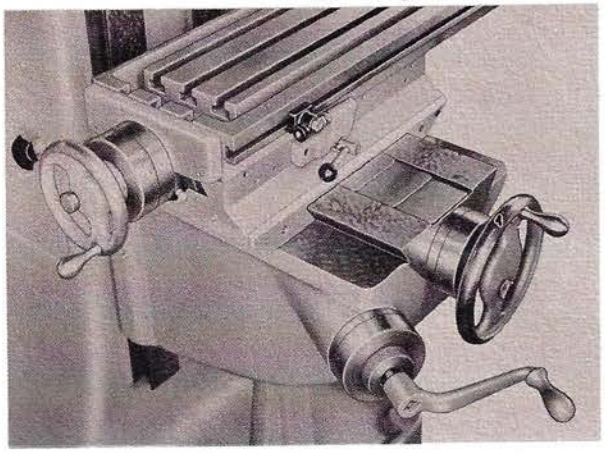
In vertical and angular milling and boring rigidity is the key to accuracy.

The U. S. Vertical Milling Machine is built to new high standards of rigidity. Heavy internally braced column casting provides extra wide bearing surface.

Mounting motor on solid steel overarm balances head, assures maximum resistance to vibration and deflection.

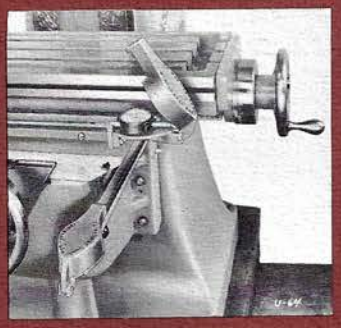
Major castings are internally ribbed; dovetails are deep and hand scraped.

Close tolerances, carefully maintained by U. S. craftsmen, assure accuracy in keeping with the highest machine tool standards.



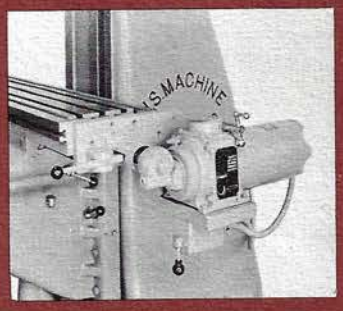
convenient controls . . . for operational ease . . . increased production

Giant-sized dials are satin chrome finished, accurately calibrated. Gib locks are positioned for operator's convenience.



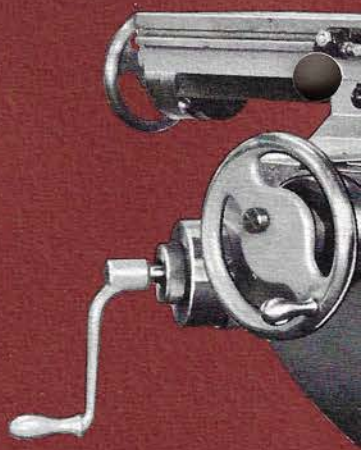
dial indicators

Dial indicators, mounted in aluminum housings, are available for use with troughs, stops, and precision measuring rods for exceptionally close tolerance work.



powerfeed to table

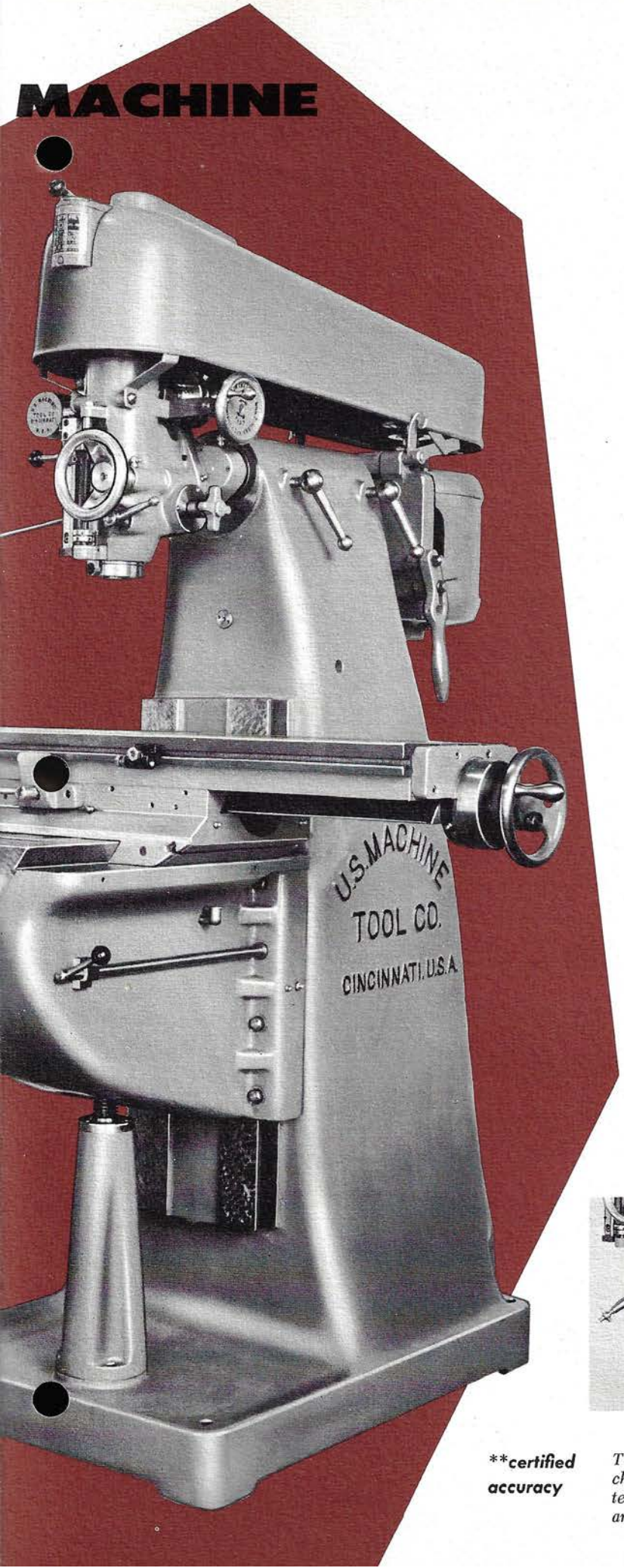
Independently motor driven longitudinal table powerfeed is provided by means of pictured drive. Infinitely variable between 0-12″ per minute; reversible.

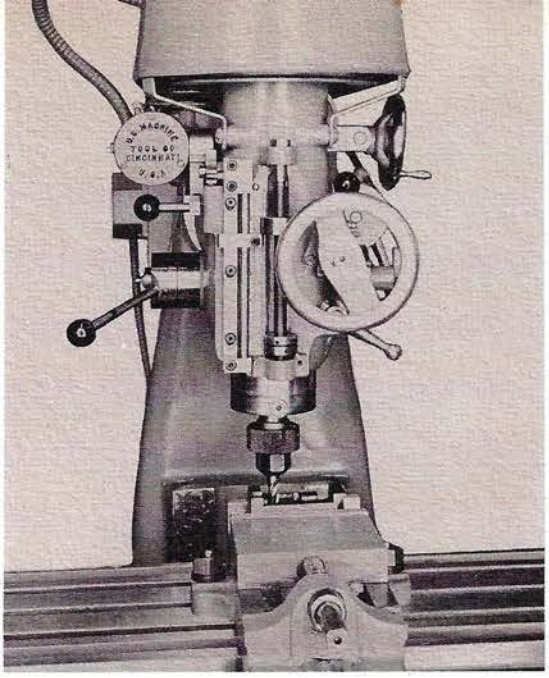


accessories

Plain or swivel vise, boring head, quick change collet system, chucks, dividing head, and other convenient accessories available

MACHINE





power feed head

For utmost versatility and capacity, the U.S. Power Feed Head provides these important advantages:

- Infinitely variable feed from .002″ to. 008″ per revolution
- Feed rate may be varied while in operation
- 5½″ of power quill travel
- Completely enclosed hard chrome plated quill
- 800 pounds of "down thrust"
- Coarse and fine hand feeds as well as power feed
- Variable positioning of coarse feed lever and quill lock handle
- Drive by B section V belt

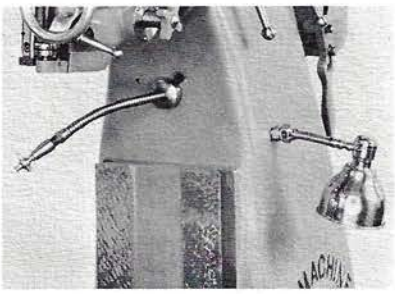
hand feed head

Available as alternate. Has coarse and fine feeds, and same capacity as powerfeed head.

ECONOMICAL

You'll find the U. S. Vertical Milling Machine surprisingly economical.

It offers capacities far in excess of its nominal cost without sacrificing the basic, characteristic "U. S." simplicity of construction. It is easy to operate even for novice mechanics.



Lamp and Coolant Hose

Coolant system, mounted in base of column, has retractable outlet hose that may be positioned as required. Machine light is also provided with retractable, flexible cable.

****certified accuracy**

The accuracy of each U. S. Vertical Milling Machine is certified. A check list accompanies every machine listing 10 exacting operational tests the machine must pass. The check list shows allowable tolerances and actual measured tolerances of the individual unit.

specifications

HEAD HOUSING:
Gray iron casting, precision bored full length of quill.

OVERARM:
4″ diameter, ground and polished solid steel bar.

Overarm permits moving head 7″ toward or away from column. (Power feed head movement, 4 ½″.)

Collar, graduated 180°, provides angular setting of head full 180°.

QUILL:
Turned from alloy steel, precision ground, 3 ¼″ diameter by 9″ long. Hard chrome plated.

Rack teeth milled into quill.

Quill travel 5 ½″. Locking depth stops graduated in thousandths. Scale graduated .050″. Positive quill lock for milling with head in fixed position.

SPINDLE:
Fine grained alloy steel, precision ground. Spindle has #9 B & S taper, 20⅜″ long.

Hole 17/32″ through its entire length for use of draw-in-bar provided.

Spindle has 6 splines to match broached collar in driven pulley.

Simple, positive spindle lock for changing cutters.

SPINDLE BEARINGS:
One *double row* and one *single row* of sealed, pre-lubricated, precision ball bearings support spindle. One additional *double row* of shielded, pre-lubricated ball bearings support driven pulley. No adjustment necessary during entire life of bearings.

SPINDLE SPEEDS:
With standard 1200 RPM, 1 H.P., 3 phase, 60 cycle, 220/440 volt motor (approximately 1150 RPM output speed) 250, 475, 740, 1200, 1800, 2850 RPMs. With Lima Drive Motor, 24 spindle speeds from 65 to 2850 RPM.

CONTROLS:
Two hand operated feeds on both hand and power feed models. Coarse (rack) feed on left of head. Full turn advances quill approximately 3⅜″. Fine feed handwheel in front of head operates through worm and worm wheel. Can be engaged or disengaged at any position. Full turn of fine feed handwheel advances quill approx. 3/16″.

SADDLE:
Cross Feed: 11″.

Dovetail: 1 ¼″ deep.

Saddle has large micrometer dial, graduated .001″, .200″ per revolution. Adjustable gib and lock.

KNEE:
Vertical Feed: 16 ½″.

Knee has large micrometer dial, graduated .001″, .100″ per revolution.

Dovetail: 1 ½″ deep. Adjustable gib and lock.

TABLE:
Working Surface: 10″ x 36″, or 10″ x 42″.

Tee Slots: 3 tee slots ⅝″ each.

Longitudinal Feed: 24″ or 30″.

Cross Feed: 11″.

Dovetail: 1 ¼″ deep.

Table has generous coolant collecting area. Handwheels at both ends of table. Micrometer dials, graduated .001″, .200″ per revolution, at both ends of table.

Adjustable gib and lock.

DRIVE:
1 H. P. reversible motor. Drive by B section V belt direct from 6 step motor pulley to matching 6 step spindle pulley. Reversible drum type switch mounted in guard convenient to operator.

Simple belt changing device holds motor in tilted position to facilitate belt changes.

LUBRICATION:
Head: Prelubricated and sealed ball bearings.

Body: Convenient oil cups and alemite fittings for oil lubrication of all bearing surfaces, gears and screws.

MISCELLANEOUS:
Weight—net: 1 ton (approx.) Cubic measurement crated: 140 cubic feet (approx.) Size of foot of base: 23 ½″ x 34″ Overall height: 69″. Floor Space required: 65″ x 80″. Weight—crated: (Domestic) 2275 lbs. (approx.). Weight—crated: (Export) 2450 lbs. (approx.).

Above specifications are subject to change without formal notification.

THE U·S·Burke
MACHINE TOOL DIVISION
Brotherton Road
Cincinnati 27, Ohio

Litho in U.S.A.