

ELECTRO-MECHANO
8-INCH PRECISION DRILLING
MACHINES FOR SMALL
DIAMETER HOLES

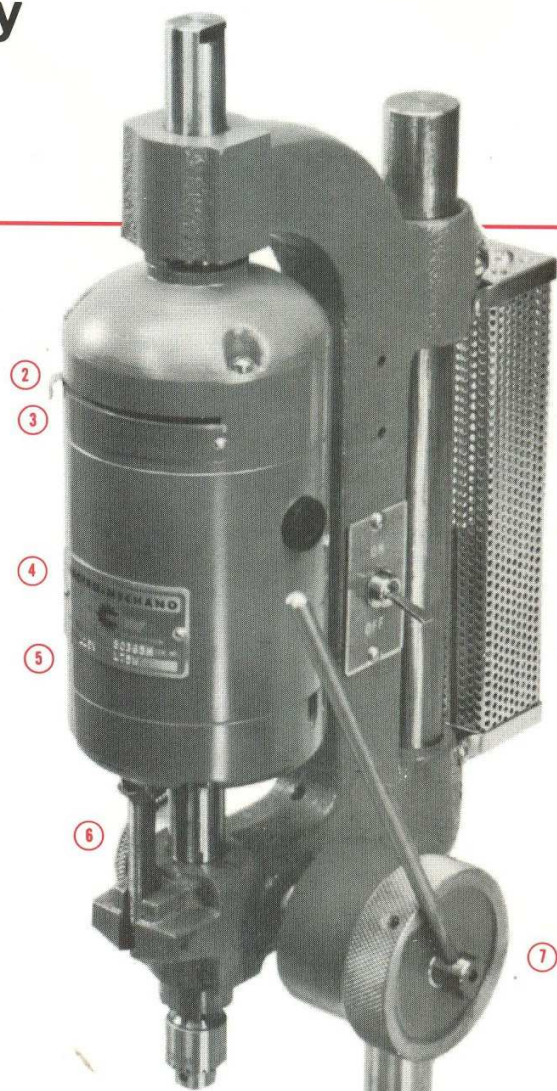
Increase Shop Production/Accuracy with ELECTRO-MECHANO'S High-Speed Precision Units

Electro-Mechano 8-inch drill presses are designed for high-speed production drilling from .004" to 5/32" diameter. Ideal for a wide variety of small-hole jobs, these units increase shop productivity and efficiency through their unique combination of precision and simplicity — the result of many years' experience in engineering and performance.

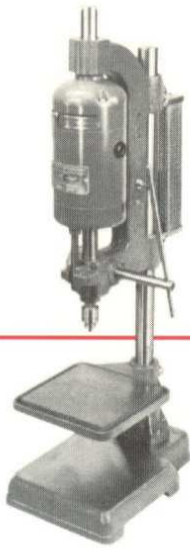
The conventional arrangement of separate motor and spindle, connected by belt and pulleys, has been replaced by a single shaft suspended at three critical points by pre-lubricated, sealed precision ball bearings. The result — smooth, quiet, high-speed operation with virtually no noise or vibration. Drill breakage is reduced to an absolute minimum, and operator efficiency is improved.

With all their features, you'll be surprised how economical these units are to own and operate.

1. **STURDY MOUNTING** — Side play, one of the main causes of drill breakage and poorly drilled holes, has been eliminated through the use of wide-spaced, extra-long quill bushings secured in rugged yoke.
2. **QUICK-SET SPEED CONTROL** — Front-mounted lever indicating actual drill RPM permits quick adjustment of spindle speed. No need to remove covers, loosen belts or change belt positions. Continuously variable speeds from 1,000 to 10,000 RPM or 2,500 to 15,000 RPM. For speeds from 15,000 to 25,000 RPM, an SCR controller is added. The addition of the solid state controller eliminates the governor.
3. **CENTRIFUGAL GOVERNOR** — Unlike conventional rheostatic speed control which permits speed variances with load changes, Electro-Mechano's centrifugal governor maintains exact desired drill speed, load or no load. This means greater accuracy, faster production and less drill breakage.
4. **PERFECT BALANCE** — Armature, governor and chuck mounted on a single shaft results in minimum vibration and smooth chuck operation at all speeds.
5. **DEPENDABLE HIGH-SPEED MOTOR** — Electro-Mechano's compact, universal-type motor is engineered to supply adequate power for drilling all types of material. Delivers trouble-free, dependable long-life performance for thousands of hours of continuous production drilling.
6. **POSITIVE DEPTH STOP** — Easily adjustable mechanical depth stop insures close depth tolerances. Mounted close to the quill, the depth stop exerts no lateral pressure on drill.
7. **MICRO-FEED CONTROL** — Provides 4:1 reduction ratio for sensitive feed for drills down to .004". Micro-feed is standard on Models 101 and 105. Direct feed is used for No. 60 to 5/32" drills. Either feed is instantly available by a simple engagement mechanism. This dual feed feature insures precise control for every drill size.

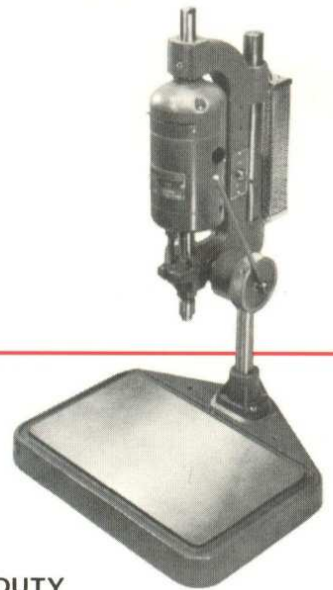


Models and Specifications



STANDARD DUTY

Electro-Mechano has four 8-inch drill press models — standard and heavy duty — to meet your small-hole drilling requirements. All models are engineered to provide years of dependable, trouble-free performance.



HEAVY DUTY

MODEL 101 DRILLS .004" (0,10) to 3/32" (2,4)

Motor 1/10 H.P. @ 10,000 RPM
 Spindle Stroke 1-1/2" (38,1)
 Chuck Run-Out Max. .001" (0,026)
 Spindle Feed Micro & Direct
 Spindle Speed 1,000-10,000 or 2,500-15,000 RPM
 Base Working Surface 5-3/4" (145) x 5-3/4" (145)
 Table Supplied 5" (125) x 5" (125)
 Weight Net 28 lbs. (12.7 kg) — 36 lbs. (16.4 kg)

MODEL 102 DRILLS No. 60 (1,05) to 3/32" (2,4)

Motor 1/10 H.P. @ 10,000 RPM
 Spindle Stroke 1-1/2" (38,1)
 Chuck Run-Out Max. .0025" (0,064)
 Spindle Feed Direct Only
 Spindle Speed 1,000-10,000 or 2,500-15,000 RPM
 Base Working Surface 5-3/4" (145) x 5-3/4" (145)
 Table Supplied 5" (125) x 5" (125)
 Weight Net 28 lbs. (12.7 kg) — 36 lbs. (16.4 kg)

MODEL 105 DRILLS .004" (0,10) to 5/32" (3,9)

Motor 1/8 H.P. @ 6,000 RPM
 Spindle Stroke 1-1/2" (38,1)
 Chuck Run-Out Max. .001" (0,026)
 Spindle Feed Micro & Direct
 Spindle Speed 1,000-10,000 or 2,500-15,000 RPM
 Base Working Surface 7" (175) x 12" (305)
 Weight Net 38 lbs. (17.25 kg) — 52 lbs. (24 kg)

MODEL 106 DRILLS No. 60 (1,05) to 5/32" (3,9)

Motor 1/8 H.P. @ 6,000 RPM
 Spindle Stroke 1-1/2" (38,1)
 Chuck Run-Out Max. .0025" (0,064)
 Spindle Feed Direct Only
 Spindle Speed 1,000-10,000 or 2,500-15,000 RPM
 Base Working Surface 7" (175) x 12" (305)
 Weight Net 38 lbs. (17.25 kg) — 52 lbs. (24 kg)

NOTE: Dimensions in parentheses () indicate millimeters.

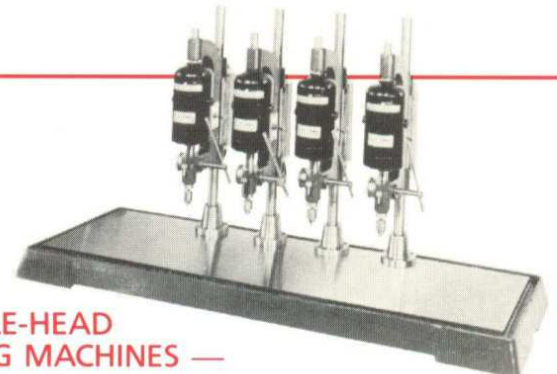
GENERAL INFORMATION

Overall height 22" (560)
 Column to chuck center 4" (100)
 Max. distance chuck to base 7" (175)
 Spindle square to base and table at 2-1/2" (63) radius ±.003" (0,08)
 Spindle square to precision table at 2-1/2" (63) radius ±.001" (0,026)
 Motor operates on 110 to 125 volts AC or DC; 25 to 60 cycles.
 Boxed for export (About 3 cu. ft., 915 cu. mm) Add 32 lbs. (14.5 kg.)
 Warranty period 90 days



UNMOUNTED DRILLING UNITS —

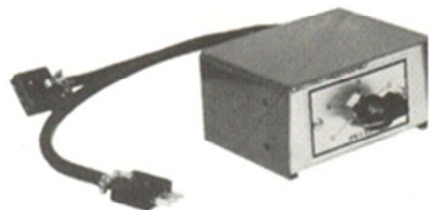
Unmounted drill units can be supplied for use in special drilling machines which have their own feed mechanisms. The units should be mounted in a split boss which clamps the lower quill. They can be mounted in any position. The metal resistor cage connected to a four-foot power cord should be positioned out of the way of chips and coolant.



MULTIPLE-HEAD DRILLING MACHINES —

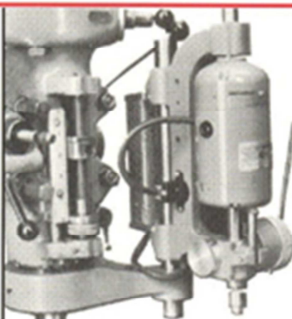
Up to six drill heads can be mounted on one large base for sequential drilling. The 3/4"-thick plate base measuring 11" x 40" is stress relieved and surface ground. A coolant trough surrounds the work surface.

Wide Selection Of Accessories To Increase Drilling Accuracy and Productivity



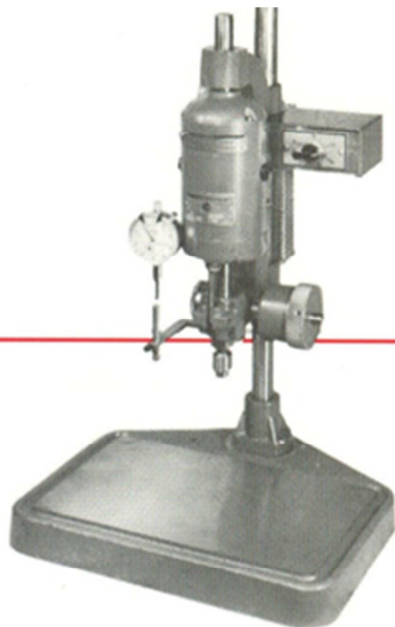
POWER CONTROL —

This solid-state device provides smoother low-speed governor operation. Catalog Number 136.



VERTICAL MILL BRACKET —

Permits mounting of drill head directly on vertical milling machine. This extends the speed range of the mill, provides x-y table movement for the drill head, and allows the drilling of larger pieces. Catalog Number 127.

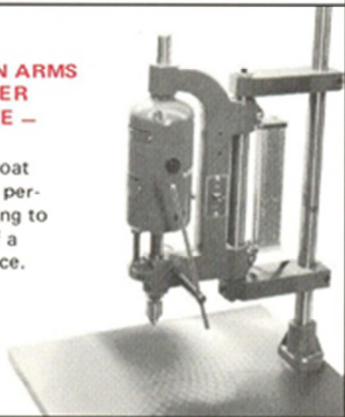


MODEL 105

Machine with accessories.

EXTENSION ARMS AND LARGER BASE PLATE —

Increases throat depth to 8", permitting drilling to the center of a 16" workpiece.



DEPTH DIAL INDICATOR —

Clearly shows the depth of drilled hole. Catalog Number 130.



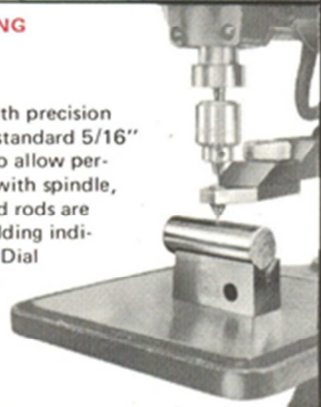
5X MAGNIFIER —

Gives machine operator a larger view of the work. Catalog Number 133.



DRILL BUSHING HOLDER —

Holds a plate with precision bored hole for standard 5/16" drill bushing. To allow perfect alignment with spindle, specially formed rods are supplied for holding indicators (Federal Dial Test or Starrett Last Word). Catalog Number 129.



PRECISION ALBRECHT CHUCK —

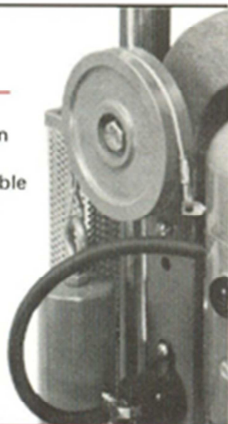
Drills are equipped with standard three-jaw chucks to accommodate drills down to .013". For smaller drills down to .004", Albrecht chucks are recommended. Catalog No. 443.

ERICKSON COLLET CHUCK —

For greater accuracy, the Erickson collet chuck with a runout of .0005" is available. Seven collets cover the range from No. 80 to 1/4". Catalog Number 450.

DRILL COUNTERBALANCE —

To increase sensitivity in drill feed, a frictionless counterbalance is available in place of the standard return spring.



EM ELECTRO-MECHANO

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