

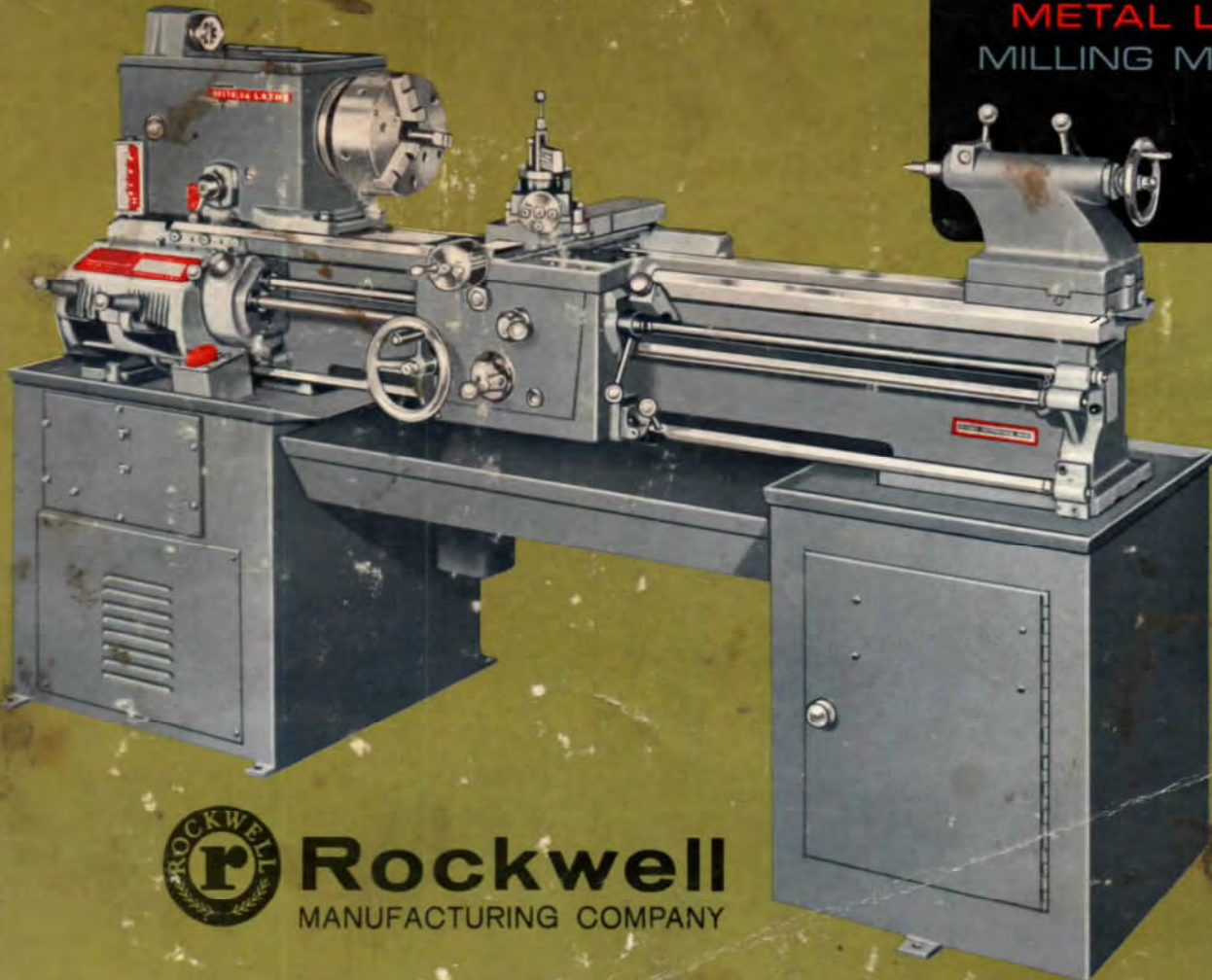


Wesco Equipment & Supply Corp.
Bradley St. 2040, Westtown, N. Y.
Phone 780-4736

machine
tools



METAL LATHES
MILLING MACHINES



Rockwell
MANUFACTURING COMPANY

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QUALITY CONTROL CERTIFICATE

Rockwell MANUFACTURING COMPANY
POWER TOOL DIVISION



DELTA 14" METAL CUTTING LATHE

CATALOG NUMBER _____ INSPECTED BY _____
SERIAL NUMBER _____ DATE _____

This Delta 14" Metal Cutting Lathe is a precision machine tool, modern in design and built to highest quality standards. Before it left our factory it had to pass more than 50 tests for dynamic balance, accuracy and ease of operation. Some of these test results are reported here to show you the quality built into your particular lathe.
The Delta 14" Metal Lathe is built to give you many years of good service. PLEASE STUDY THE INSTRUCTION MANUAL CAREFULLY BEFORE OPERATING THE LATHE. Keep the lathe clean, well lubricated and in correct adjustment. The accuracy of the work it produces depends on you.

| Dial Indicator Inspection* | | | Additional Inspection | |
|--|---------------|------------|--|--------------|
| TEST | Limit Allowed | This Lathe | TEST | Check W.O.E. |
| 1. Spindle Nose Runout (Indicate on O.D. of Taper) | .004 T.I.R. | | 1. Travel of Carriage Full Length of Bed, using Handwheel. | |
| 2. Spindle Taper Hole Runout—Taper Bar in Spindle Hole—Indicate at End of Spindle Nose | .004 T.I.R. | | 2. Lead Screw—Lead per Foot = .0015 and Lead on any 4" = .0005. | |
| 3. Spindle Taper Runout—Taper Bar in Spindle Hole—Indicate 12" from Spindle Nose | .0008 T.I.R. | | 3. Lead Screw Control Lever (Forward, Neutral, Reverse). | |
| 4. Spindle Alignment with Bed Ways—Vertical—Along 12" of Taper Bar—High at End of Bar | 0 to .001 | | 4. Positioning of Half Nuts (Lathe Running). | |
| 5. Spindle Alignment with Bed Ways—Horizontal—Along 12" of Taper Bar | ~ .0003 | | 5. Lock-out Device for Half Nuts. | |
| 6. Vertical Alignment of Head and Tail Centers (High at Tailstock) | 0 to .001 | | 6. Quick Change Gear Box—Check for Noise or Vibration with Lathe Running. | |
| 7. Cross Slide Alignment—on Face Station at Center only on 12" Diameter (1/2" R.) | .001 | | 7. Graduations on Three Micrometer Gages and Compound Swivel Saddle. Witness Marks for Tailstock Setover, Swivel Saddle 1/2" and Three Micrometer Gages. | |
| 8. Lead Screw Cam Action | .0004 | | 8. Check Maximum and Minimum Spindle Speeds in Direct Drive (1500 and 210 RPM) using Stroboscopic Tachometer. | |
| 9. End Feed Screw Backlash 18 Marks on Micrometer Gages | .004 | | 9. Vibration from 210 to 1600 RPM use an Envel 9805* Attachment on bed and .0001" at spindle using Electronic Vibration Analyzer. | |
| 10. Compound Feed Screw Backlash | .004 | | 10. Turn and Face Drive Plate and Pack with Same Lathe. | |
| 11. Tailstock Feed Screw Backlash | .010 | | 11. Make Light Cut 1/2" Long on Stock Held in a Chuck and Check for Taper—not to exceed .0005. | |
| 12. Bed Level—using Spirit Level on Transverse Direction | .0005 to 12" | | 12. Make Heavy Cut at least 1" in Length @ 450 RPM, 1/4" Dia. C-1113 Stock with 0.124 Feed, 300 Depth of Cut with 1055 Bt. Near Tool. | |
| 13. Lead Screw Alignment—Horizontal—End to End | .004 | | 13. Cut a 3/16 Thread. | |
| 14. Lead Screw Alignment—Vertical—End to End | .004 | | 14. Tailstock Even Center. | |
| 15. Cam Action of Spindle | .0005 T.I.R. | | 15. Check Witness Mark on Tailstock Ram—Shows Correct Gear Height? | |

*Meet ASA Accuracy Standards.

Printed in U.S.A.

414-03-751-5001



ROCKWELL
MACHINE TOOLS ARE

QUALITY CONTROLLED

at every stage!

- RAW MATERIALS
- FINISHED PARTS
- ASSEMBLED COMPONENTS
- COMPLETED PRODUCT

Every Rockwell-Delta Machine Tool is a precision machine, modern in design and built to the highest quality standards. Before it leaves the factory, it must pass more than 50 tests for dynamic balance, accuracy and ease of operation.

Because some of these tests are of special interest to the prospective customer, Delta provides a Quality Control Certificate with each Delta Lathe, Hand Screw Machine or Milling Machine.

This certificate shows the *standard of accuracy* established by Rockwell-Delta engineers for lathes or mills in a given class. It also shows the *accuracy of performance* of each individual machine. This performance is attested to by the signature of the inspector, who writes in the serial number of the machine, the date of inspection and the results of each test.

You are invited to see for yourself how much any given Rockwell-Delta machine tool exceeds the established standards, *before you buy!*

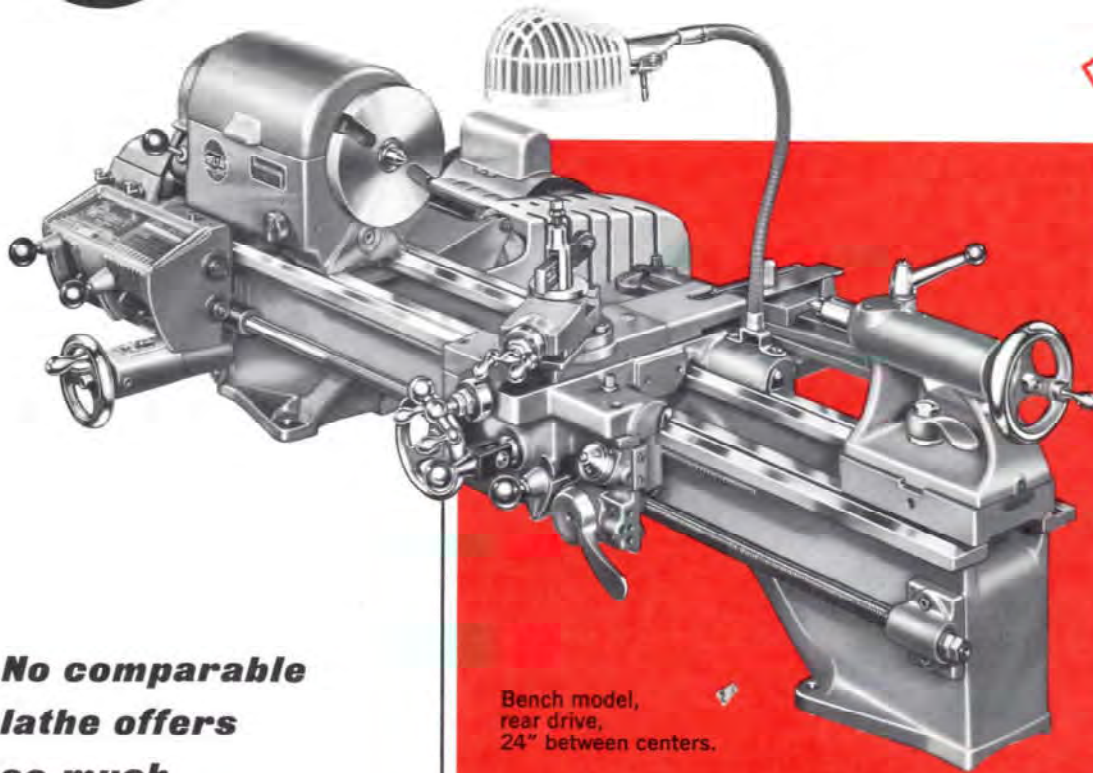
This Optical Comparator in the Quality Control Department is used for precision measurement of a wide variety of machine tool parts, assuring high quality levels.

Before a lathe bed leaves the way grinding machine, the operator checks the ways with a precision level for surface relationship and parallelism. The ways must be accurate to within .001" over the entire length of the bed.



ROCKWELL-DELTA

4



10"

**METAL
LATHES**

**No comparable
lathe offers
so much
real value!**

You'll like everything about this Rockwell-Delta 10" Lathe—its modern look, on-the-job performance, and especially the low price. Designed for industry, schools or small workshops, it fills the need for a safe, low cost, precision lathe with heavy duty capacity.

You get *variable speed drive, 3/4" collet capacity, massive, double row, precision ball bearing at the work load end of the spindle*—an exclusive combination of features never before available on a lathe this size at comparable cost.

Bench model,
rear drive,
24" between centers.



Cabinet model,
underneath drive,
36" between centers.

STANDARD EQUIPMENT

Quick change gear box
Matched V-belts for spindle
Variable speed drive complete,
including belts
Motor pulley
6" diameter drive plate
Centers for headstock
and tailstock

Tool post, ring and rocker
Spindle adapter, No. 2
Morse taper i.d.
Thread chasing dial
Combination wrench for
tool post, etc.
Box wrench for tailstock
Extra shear pins



LATHE / SELECTION GUIDE

10" metal lathes

(Less Electricals)

| MODEL | BETWEEN CENTERS | BED TYPE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|---------------------------------|-----------------|----------|------------------------|----------------|
| Bench Model, Rear Drive | 24" | Standard | 345 | 25-700 |
| | 24" | Hardened | 345 | 25-706 |
| | 36" | Standard | 388 | 25-710 |
| | 36" | Hardened | 388 | 25-707 |
| Cabinet Model, Underneath Drive | 24" | Standard | 600 | 25-720 |
| | 24" | Hardened | 600 | 25-708 |
| | 36" | Standard | 675 | 25-721 |
| | 36" | Hardened | 675 | 25-709 |

motors and controls MOUNTED AND WIRED ON CABINET MODELS ONLY

(See Pages 32 and 33 for separate Motors and Controls for Bench Model Lathes)

| MOTOR | MOTOR CONTROL | MOTOR ENCLOSURE | CYCLES & MOTOR RPM | VOLTAGE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--|----------------------------------|--------------------|--------------------|-------------|------------------------|----------------|
| Single Phase, Three-Quarter Horsepower | Drum Switch Only | Guarded Drip Proof | 60-1725 | 115/230 | 40 | 49-450 |
| | | TEFC | 60-1725 | 115/230 | 42 | 49-451 |
| | Drum Switch and Overload Switch | Guarded Drip Proof | 60-1725 | 115/230 | 43 | 49-484 |
| | | TEFC | 60-1725 | 115/230 | 45 | 49-485 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 60-1725 | 115/230 | 47 | 49-486 |
| | | TEFC | 60-1725 | 115/230 | 49 | 49-487 |
| Three Phase, Three-Quarter Horsepower | Drum Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 36 | 49-452 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 41 | 49-453 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 40 | 49-454 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 45 | 49-455 |

NOTE: Unless otherwise specified, single phase lathes will be wired for 115V and three phase lathes for 208-220V. Power Cord and Plug supplied for single phase lathes only.

machine data

CAPACITY

Swing over bed and saddle wings 10 1/8"
 Swing over cross slide 6"
 Between centers (tailstock completely on bed)
 Short bed 24 1/2"; Long bed 36 1/2"
 Hole through spindle 1 1/8"
 Maximum capacity with 4-C style collet 3/4"

THREADS AND FEEDS

Quick change gear box has 54 thread and feed changes L.H. or R.H.
 Threads, 4, 4 1/2, 5, 5 1/2, 5 3/4, 6, 6 1/2, 6 3/4, 7, 8, 9, 10, 11, 11 1/2, 12, 13, 13 1/2, 14, 16, 18, 20, 22, 23, 24, 26, 27, 28, 32, 36, 40, 44, 46, 48, 52, 54, 56, 64, 72, 80, 88, 92, 96, 104, 108, 112, 128, 144, 160, 176, 184, 192, 208, 216, 224.
 Range of feed rates per spindle revolution
 Longitudinal0810-.0014; Cross0413-.0007
 Lead Screw 3/8" dia. Acme 8 t.p.i.

SPINDLE AND HEADSTOCK

Infinite choice of speeds in direct drive 250-1500 rpm
 Infinite choice of speeds in gear drive 50-300 rpm
 Spindle (Hardened and ground alloy steel)
 Diameter at inboard bearing 1 3/8"
 Center used No. 2 M.T.
 Nose (Has ground threads) 1 1/2"-8
 Hole modified (shortened) No. 9 B. & S.

BED (heavy U-section cross braces)

Has two V-ways and two flat ways
 Length:
 Short bed 44 3/8"; Long bed 56 3/8"
 Width 6 3/4"; Depth (in center) 4 1/4"
 Width of V's 3/4"

CARRIAGE

Length of saddle V-way 10"; width of saddle bridge 3 1/4"
 Cross slide travel 6"; compound slide travel 2"

TOOL POST

3/4 x 1 1/8" opening (takes standard tool holders for 1/4" bits)

TAILSTOCK (has automatic center ejection)

Ram diameter 1 1/8"; Ram travel 2 1/2"
 Length of graduations marked on ram, by 1/16ths 2 1/2"
 Center used No. 2 M.T.
 Set-over adjustment (either way) for taper turning 1 1/4"

OVERALL DIMENSIONS, BENCH MODEL

Short Bed 53" left to right x 23 1/2" front to rear x 16 1/4" high
 Long Bed 65" left to right x 23 1/2" front to rear x 16 1/4" high

OVERALL DIMENSIONS, FLOOR MODEL

Short Bed 54" left to right x 22 1/4" front to rear x 45 1/2" high
 Long Bed 66 1/4" left to right x 22 1/4" front to rear x 45 1/2" high

MOTORS

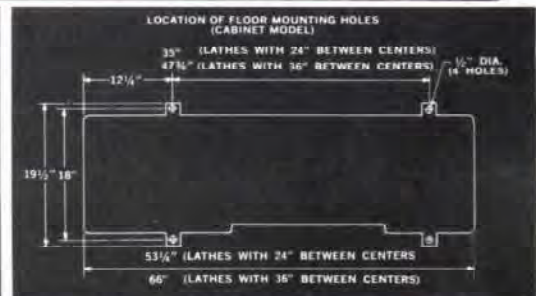
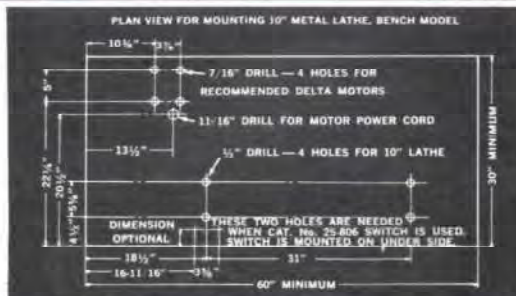
Accommodates NEMA FRAME MOTOR 56
 Horsepower recommended 3/4
 Speed recommended 1725 rpm

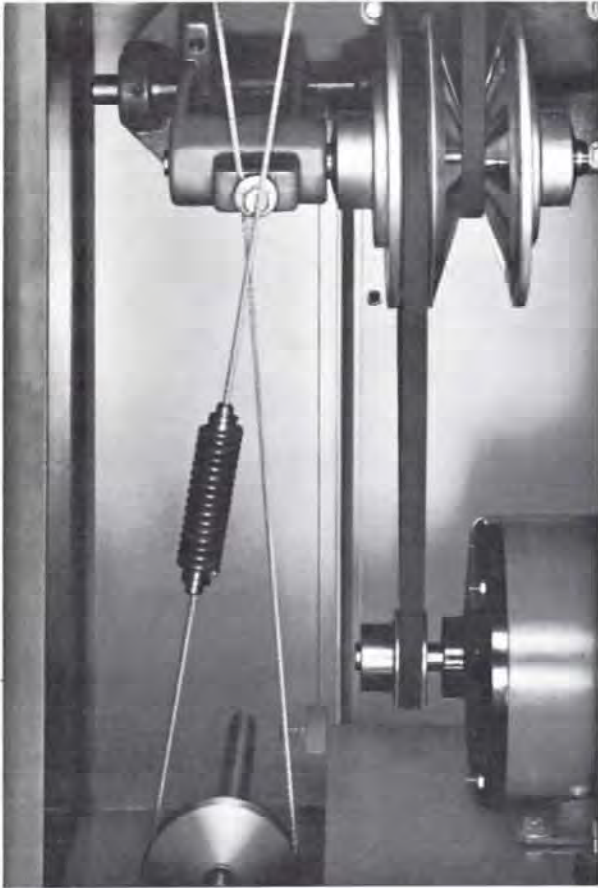
FLAME HARDENED BED

Rockwell-Delta 10" Metal Lathes are available with flame hardened bed ways that assure longer wearing qualities and added protection against denting and scoring. Ways are flame hardened, then precision ground with diamond-dressed wheel on special, precision, way-grinding equipment.

Flame hardened bed ways are highly recommended wherever Rockwell-Delta 10" Lathes are to be used for machining materials that produce chips or dust that may have an abrasive action on the ways. Flame hardening assures continued original accuracy of the bed ways, even under the stress of repetitive production operations.

floor space requirements





NEW, IMPROVED VARIABLE SPEED DRIVE ON CABINET MODELS

Gives you all the advantages of a variable speed drive, with an infinite choice of speeds from 50 to 1500 rpm. Its simple construction, with few operating parts, makes it function very smoothly. During speed changes, the variable speed pulley moves up or down at the correct angle to maintain perfect belt alignment at *all* speeds. This assures higher power transmission efficiency— $\frac{3}{4}$ HP motor does work of 1 HP motor required with "old-fashioned," spring-loaded drives.



UNIQUE DRIVE SELECTOR

The new variable speed drive, furnished on cabinet models, utilizes a fast-acting lever in place of the hand wheel furnished on bench models. The same wide speed range is offered, however, the speed dial is easier to read, speed changes are made more quickly and there is a cam lock feature that holds the speed constant once it has been selected.



FLEXIBLE SPEED CONTROL

Speeds on bench model can be changed quickly and without effort by turning the large, conveniently located hand wheel. With the easy-to-read pointer and dial, the operator can tell at a glance the spindle speed he is getting through the full range from 50 to 1500 rpm. A special bonus feature lets him pre-set the high and low speed limits—a real advantage on repetitive, multiple diameter work—a safety feature for students and inexperienced operators.



ROCKWELL-DELTA

**these
features
make the modern
Rockwell-Delta
10" Metal Lathe
an unequalled
value!**



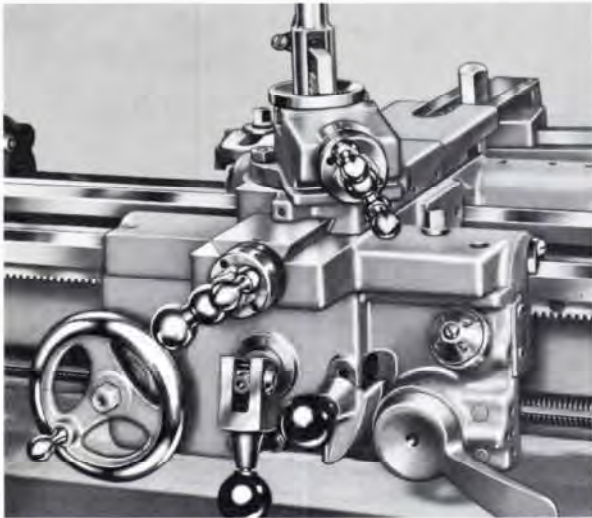
RUGGED HEADSTOCK

Features heavy duty construction throughout. Over-sized spindle is made from heat-treated alloy steel, hardened and ground to a super finish. Spindle nose threads, hardened and then ground, resist damage and maintain original accuracy. Massive, double row, precision ball bearing at spindle nose end features angular contact and internal preloading to prevent all play and assure rigid, accurate work support. Large ball bearing at outboard end "floats" to compensate for expansion as spindle warms up.



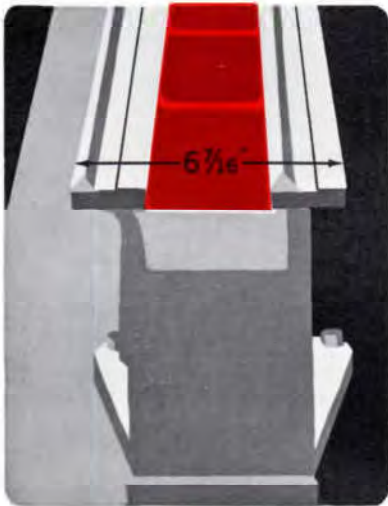
BIG COLLET CAPACITY

You get a full $\frac{3}{4}$ " through the spindle capacity using 4-C style steel collets and $\frac{15}{16}$ " capacity using Jacobs Rubber-Flex Collets. For second operation, the Rubber-Flex collets hold round bars up to $1\frac{1}{8}$ ". This means you can handle large jobs which you could not ordinarily handle on other lathes of this size. Taper for steel collets is ground directly into spindle for extreme accuracy.



ADVANCED CARRIAGE ENGINEERING

Compound slide rest, even in its most forward position, does not overhang the swivel bearing pad. Micrometer collars are direct reading type. Apron has a thread dial as standard equipment. Half-nuts have a special, crisp-actuation design, appreciated especially by experienced operators. Powerful clutch has infinite choice of settings—can be pre-set to slip when overloaded (to protect the lathe) or can be instantly adjusted, even while lathe is running, for very heavy power transmission.



EXTRA WIDE BED

You get an exceptionally wide bed ($6\frac{7}{16}$ "") to assure greatest accuracy possible. Outstanding features include: one-piece construction, with integral riser blocks, plus heavy U-section cross braces for added strength. There are no traps or obstructions to catch chips or coolant. The bed is made of close grained, hi-tensile iron, fully normalized before machining. Precision ground ways provide extremely accurate parallelism with the headstock spindle over the entire length of bed.

MODERN TAILSTOCK

Rugged, compact, very easy to move and adjust. Can be accurately offset for taper turning by means of adjusting screws. Index marks show exact amount of offset. Ram is marked in $\frac{1}{16}$ ". When fully retracted, ram automatically ejects centers. Large ram lock handle can be set at whatever angle the operator finds most convenient.

QUICK CHANGE GEAR BOX

Gear box provides a choice of 54 feed rates and 54 thread pitches (including 27 threads per inch) by means of two selector levers with rugged, needle bearing equipped tumbler gears. A large, easy-to-read thread and feed chart, conveniently mounted to the top of the box, makes it easy to set selector levers. A lubrication chart, located where it cannot be overlooked, graphically provides all necessary lubrication information.

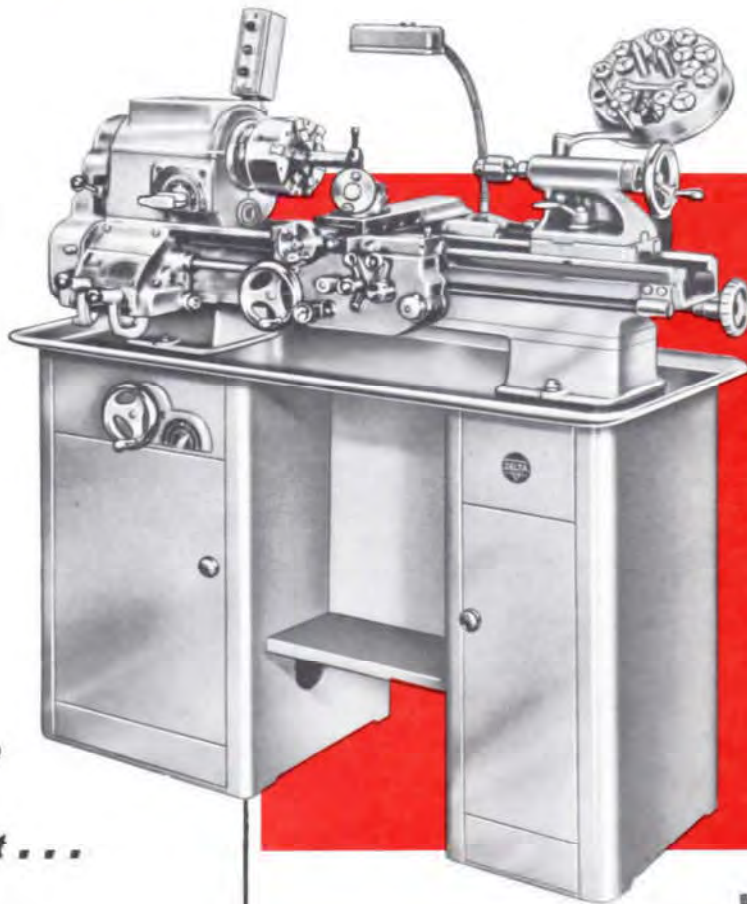
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ROCKWELL-DELTA

3



11"

METAL LATHES

Give you big machine performance without big machine cost . . .

Cabinet model, 24" between centers.

No matter what your requirements—production capacity, tool-room precision, or school shop safety—you'll get all the machine you need when you choose a Rockwell-Delta 11" Metal Lathe. You can make heavier cuts, faster, because these lathes give you the "beef" you'd normally expect only from machines costing much more. And safe, close tolerance operations on every job are assured by the many built-in features exclusive with Delta. Available in 4' bed and 5' bed models with a complete range of accessories to help you match the tool to your job.

Cabinet model, 36" between centers.



STANDARD EQUIPMENT (included on all models)

- Cabinet with coolant pan, doors and shelves
- Quick change gear box
- Variable speed drive complete with belts
- Extra shear pins
- Thread chasing dial
- Thread cutting stop
- Motor pulley for 3/4" shaft

- Tool post, ring and rocker
- 7" dia. drive plate
- Two 60° centers. No. 2 MT for headstock—No. 3 MT for tailstock
- Combination wrench for tool post, etc.
- Spindle adapter, No. 2 MT i.d.
- Box wrench for tailstock
- Spanner wrench for draw nut (included on tapered nose models only)



LATHE / SELECTION GUIDE

11" metal lathes

(Less Electricals)

| SPINDLE NOSE | BETWEEN CENTERS | BED TYPE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--------------------------------|-----------------|----------|------------------------|----------------|
| L-00 Tapered Key Drive | 24" | Standard | 800 | 25-130 |
| | 24" | Hardened | 800 | 25-084 |
| | 36" | Standard | 845 | 25-140 |
| | 36" | Hardened | 845 | 25-086 |
| 2 1/4"-8 Threaded Spindle Nose | 25" | Standard | 800 | 25-100 |
| | 25" | Hardened | 800 | 25-080 |
| | 37" | Standard | 845 | 25-110 |
| | 37" | Hardened | 845 | 25-082 |

motors and controls MOUNTED AND WIRED

(See Pages 32 and 33 for separate Motors and Controls)

| MOTOR | MOTOR CONTROL | MOTOR ENCLOSURE | CYCLES & MOTOR RPM | VOLTAGE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--|---|--------------------|--------------------|-------------|------------------------|----------------|
| Single Phase, One Horsepower | Push Button Switch Only | Guarded Drip Proof | 60-1725 | 115/230 | 61 | 49-456 |
| | P. B. & Overload Switches | Guarded Drip Proof | 60-1725 | 115/230 | 64 | 49-491 |
| | P. B. Switch & Mag. Starter | Guarded Drip Proof | 60-1725 | 115/230 | 70 | 49-492 |
| Three Phase, One Horsepower | Push Button Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 48 | 49-457 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 48 | 49-458 |
| | Push Button Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 54 | 49-459 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 54 | 49-460 |
| Three Phase, One And One-Half Horsepower | Push Button Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 56 | 49-461 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 56 | 49-462 |
| | Push Button Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 62 | 49-463 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 62 | 49-464 |

NOTE: Unless otherwise specified, single phase lathes will be wired for 230V and three phase lathes for 208-220V. Power Cord and Plug supplied for single phase lathes only.

machine data

CAPACITY

| | |
|---|-----------------|
| Swing over bed and saddle wings | 11 1/4" |
| Swing over cross slide | 6 3/4" |
| Between centers with L-00 tapered key drive nose: | |
| 4 foot bed | 24"; 5 foot bed |
| Between centers with 2 1/4"-8 threaded nose: | |
| 4 foot bed | 25"; 5 foot bed |

THREADS AND FEEDS

Quick change gear box with 54 thread and feed changes R.H. or L.H. Threads: 4, 4 1/2, 5, 5 1/2, 5 3/4, 6, 6 1/2, 6 3/4, 7, 8, 9, 10, 11, 11 1/2, 12, 13, 13 1/2, 14, 16, 18, 20, 22, 23, 24, 26, 27, 28, 32, 36, 40, 44, 46, 48, 52, 54, 56, 64, 72, 80, 88, 92, 96, 104, 108, 112, 128, 144, 160, 176, 184, 192, 208, 216, 224.
Range of feed rates per revolution:
Longitudinal: .0902-.0016; Cross: .0301-.0005
Lead Screw: 3/4" dia. Acme x 8 T. P. I.

SPINDLE AND HEADSTOCK

Infinite stepless speeds in direct drive: 220-1550 rpm
Infinite stepless speeds in back gear: 45-250 rpm
Spindle dia. at roller bearings: 2 1/4"
Spindle center: takes No. 2 M.T.
Hole through spindle: 1 3/8"
Maximum collet capacity (5-C type collet): 1 1/4"

BED (furnished with leveling screws)

| | |
|--------------|---------------------|
| Length: | |
| 4 foot bed | 49 1/4"; 5 foot bed |
| Width | 8 1/4"; Depth |
| Width of V's | 3/4" |

CROSS SLIDE AND COMPOUND REST

| | |
|--|---------|
| Length of saddle V-way | 12 3/8" |
| Width of bridge | 4 1/4" |
| Cross slide travel | 6 3/4" |
| Compound travel | 2 1/4" |
| Travel of cross slide with taper attachment locked | 6 3/4" |
| Travel of carriage with taper attachment locked | 9 1/4" |

Maximum cross travel of tool by taper attachment: 1 3/8"
Powered cross feed: Wipers for saddle

TOOL POST

1/8" x 1 1/8" opening takes standard tool holders for 1/8" bits

TAILSTOCK

Ram diameter: 1 3/8"; Ram travel: 2 3/4"
Length of graduations marked on spindle by 1/64ths: .3"
Center: No. 3 M.T.
Handwheel adjustable micrometer collar graduated in .001
Set-over: 3/4"

OVERALL DIMENSIONS

Cabinet and Machine:
4 foot bed: 57 3/4" left to right x 25 1/2" front to rear x 49 1/2" high
5 foot bed: 69 3/4" left to right x 25 1/2" front to rear x 49 1/2" high
Coolant pan:
4 foot bed: 1 1/4" x 22 1/2" x 56" outside dimensions
5 foot bed: 1 1/4" x 22 1/2" x 68" outside dimensions
Drain hole at rear has 1/2" pipe tap

MOTORS

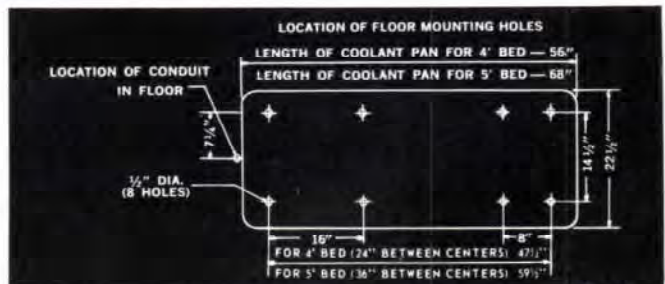
Accommodates NEMA frame motors: 182-184-203-204-224

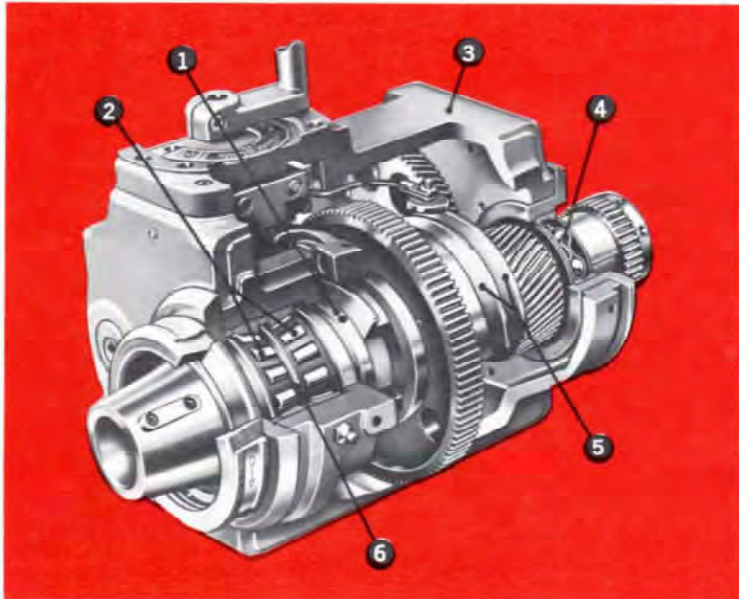


Rockwell-Delta 11" Metal Lathes are available with flame hardened bed ways that assure longer wearing qualities and added protection against denting and scoring. Ways are flame hardened, then precision ground with diamond-dressed wheel on special, precision, way-grinding equipment.

Flame hardened bed ways are highly recommended wherever Rockwell-Delta 11" Lathes are to be used for machining materials that produce chips or dust that may have an abrasive action on the ways. Flame hardening assures continued original accuracy of the bed ways, even under the stress of repetitive production operations.

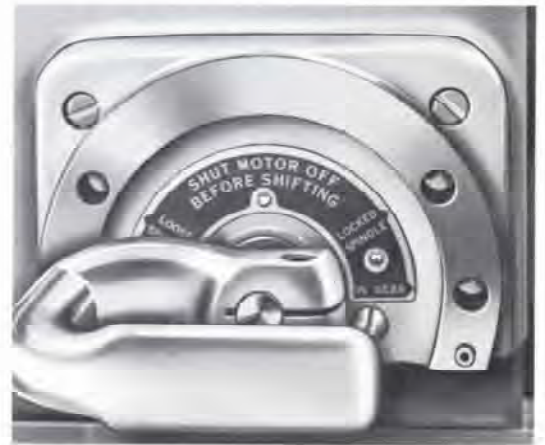
floor space requirements





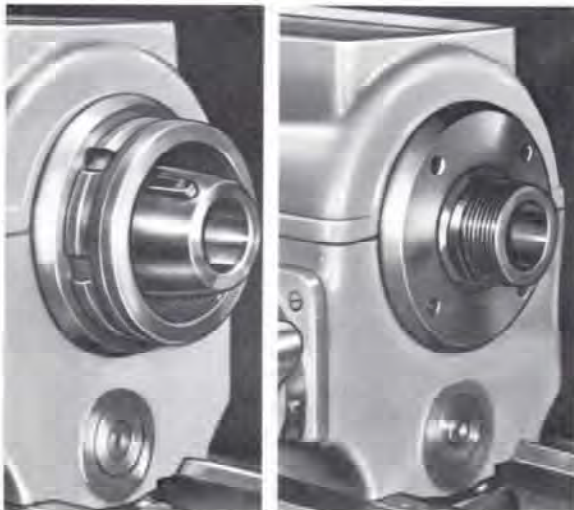
**only
Rockwell-Delta
11" Metal Lathes
offer you this
exclusive
combination
of features!**

- ① Bearing adjustment, to remove all play from spindle, is quickly made by turning easily accessible adjusting collar.
- ② Double, zero precision, tapered roller bearings at the spindle nose end easily handle heavy work loads.
- ③ Massive, one-piece head-stock body casting is precision bored to provide perfect alignment of spindle bearings, also totally encloses all back gears for added safety.
- ④ Extra large, lubricated-for-life ball bearing at outboard end "floats" to compensate for expansion as spindle warms up.
- ⑤ Double V-belt final drive is applied between the spindle bearings—close to the work load—for powerful, chatter-free power transmission even in direct drive.
- ⑥ Massive spindle—2¼" in diameter—eliminates chatter when "cutting off" or making other heavy cuts.



A UNIQUE DRIVE SELECTOR

You can shift to loose spindle, locked spindle, back gear drive or direct drive simply by moving the selector lever. *Safe* because there is no need to open up the guard . . . *Foolproof* because mechanical interlock makes it impossible to shift drive while spindle is rotating . . . *Convenient* because there are no pins to pull . . . *Fast* because any position is immediately available. *Only the Rockwell-Delta Lathe gives you all four selections with one shift lever.*



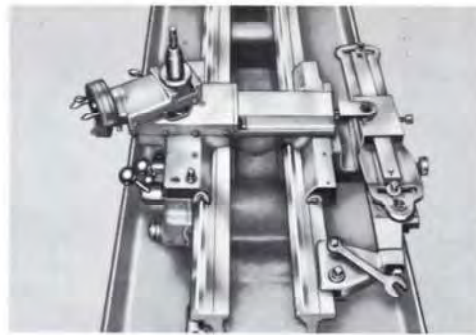
◀ A CHOICE OF L-00 TAPERED KEY DRIVE OR 2¼" — 8 THREADED SPINDLE NOSE AT NO EXTRA COST

It costs you nothing extra to take advantage of the safety, convenience and accuracy of the modern tapered spindle nose. However, if you prefer the conventional threaded nose design, a 2¼" — 8 threaded spindle nose is also available. *Only Delta gives you this choice at no extra cost.*



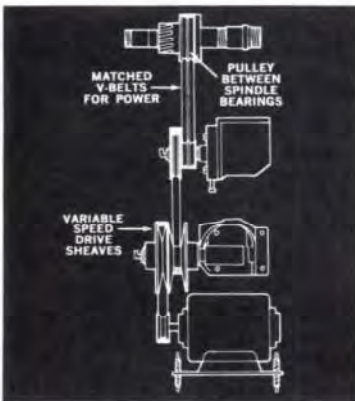
APRON ...

Double wall construction provides extra support for power feed clutch shaft and power feed worm gear shaft. It also forms an oil reservoir. Automatic, foolproof lock out feature makes it impossible to engage the power cross feed or power longitudinal feed simultaneously with the half-nut feed for threading ... stop on half-nut feed lever prevents binding, is adjustable to compensate for wear.



CARRIAGE ...

Saddle is machined for field mounting of taper attachment, follower rest and lamp. Cross slide and compound feed screws are fully protected from dust and chips. Large, direct reading micrometer collars indicate stock removed from work directly in .001" on the diameter. Positive, convenient lock features are provided for micrometer collars on both cross slide and compound. Tool post never overhangs compound swivel bearing, giving maximum support at all times.

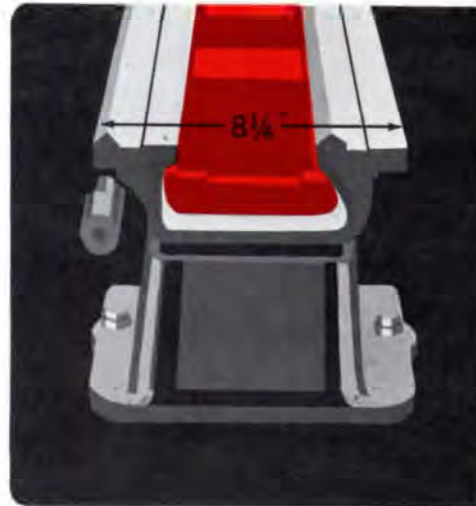


IMPROVED VARIABLE SPEED DRIVE

Gives you all the advantages of a variable speed drive, with an infinite choice of speeds from 45 to 1550 rpm—PLUS the high torque transmitting power of matched V-belts. The Delta variable speed drive incorporates an extra shaft between the variable speed drive pulley and the spindle.

This makes possible high speed power transmission through the variable speed drive belts while twin V-belts transmit steady power to the spindle.

In addition, lubricated-for-life ball bearings in the variable speed and jackshaft pulleys give you these PLUS advantages—longer machine life, more efficient power transmission, elimination of lubrication and easy speed changes.



BED ...

Massive, scientifically braced bed has deep box-section cross members. It is made of close grained alloy cast iron, normalized to relieve stresses. Flat and prismatic ways, cast integrally with bed, are made absolutely straight and parallel by modern grinding methods.

LEAD SCREW ...

Precision cut lead screw has a hidden, easily accessible shear pin and features a unique T-section key way that prevents wear on the thread and damage to half-nuts.



TAILSTOCK ...

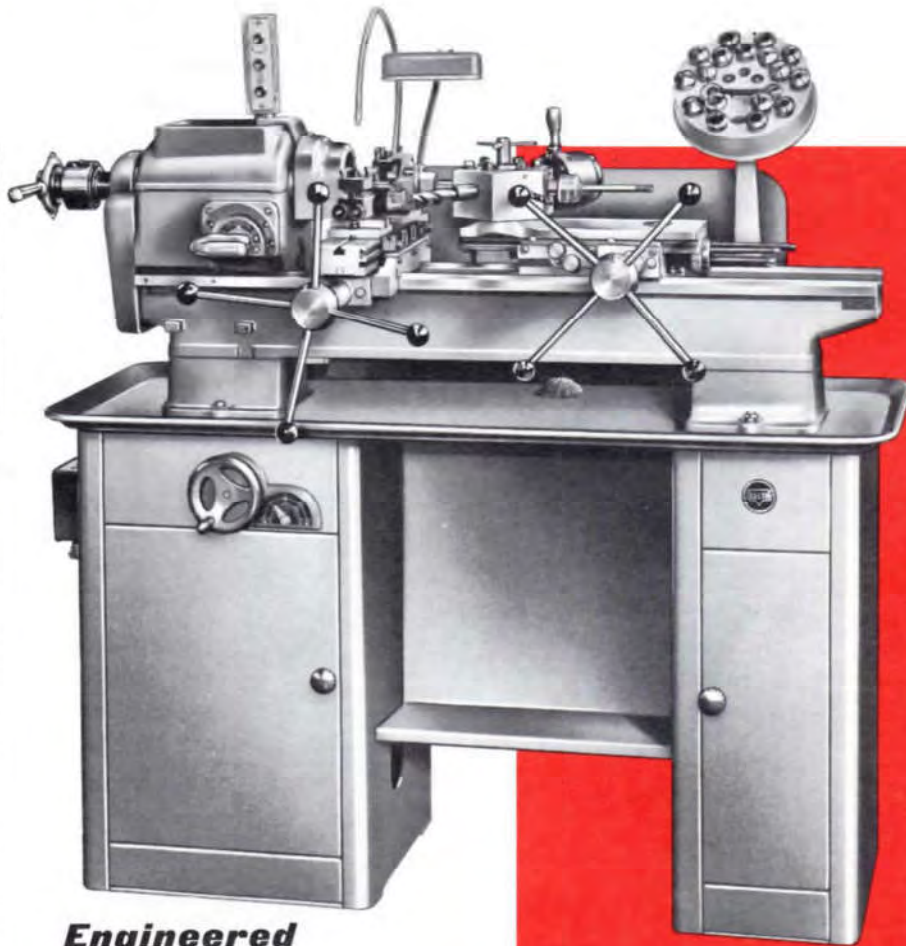
Ram is graduated in 1/16". Easily read micrometer collar, graduated in .001" with a zero start, makes precision feeding easy. Complete retraction of ram automatically ejects center. Ram has witness mark at center height for easy positioning of cutting tool.





ROCKWELL-DELTA

12



HAND SCREW MACHINE

**Engineered
to save time
and
money
on multiple-
operation
jobs . . .**

Here is a precision machine engineered to fill the gap between standard engine lathes and expensive automatic screw machines—and at lower cost than any comparable machine. Ideal for repetitive manufacturing of a wide variety of parts, it delivers the close tolerance work of machines costing three or four times as much!

Only Delta gives you 8" cross slide travel plus 1 1/4" collet capacity and turning capacity up to 6 1/2" in length. *Only Delta* gives you this massive powerful headstock plus perfected variable speed drive. *Only Delta* combines all these features with the advantages of pilot wheel cross slide feed.

You save money through lower initial cost and reduce costly set-up time between your short run production jobs when you choose the Rockwell-Delta Hand Screw Machine.

STANDARD EQUIPMENT

*Double Tool Post Cross Slide
No. 25-555

*Lever Type Collet Closer No. 25-553
or No. 25-554

†Bed Turret No. 25-567

For complete description of above
items, see Accessory Listings on
Pages 24 and 25

Cabinet with coolant pan, doors and
shelves

Variable speed drive complete with
belts

Motor pulley for 3/4" shaft
Combination wrench, 3/8" square
3/8" open end

Spanner wrench for draw nut (includ
on tapered nose models only)

Guard for outboard end of spindle

*Mounted

†Bedded and turret faces left blank, or
provided with either 3/8, 3/4 or 1" holes.
Unless otherwise specified, 3/4" holes will
be provided.

LATHE/SELECTION GUIDE
hand screw machines

(Less Electricals)

| SPINDLE NOSE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--------------|------------------------|----------------|
| L-00 | 900 | 25-160 |
| 2¼"-8 | 900 | 25-150 |

motors and controls MOUNTED AND WIRED

(See Pages 32 and 33 for separate Motors and Controls)

| MOTOR | MOTOR CONTROL | MOTOR ENCLOSURE | CYCLES & MOTOR RPM | VOLTAGE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--|---|--------------------|--------------------|-------------|------------------------|----------------|
| Single Phase, One Horsepower | Push Button Switch Only | Guarded Drip Proof | 60-1725 | 115/230 | 61 | 49-456 |
| | P. B. & Overload Switches | Guarded Drip Proof | 60-1725 | 115/230 | 64 | 49-491 |
| | P. B. Switch & Mag. Starter | Guarded Drip Proof | 60-1725 | 115/230 | 70 | 49-492 |
| Three Phase, One Horsepower | Push Button Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 48 | 49-457 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 48 | 49-458 |
| | Push Button Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 54 | 49-459 |
| Three Phase, One And One-Half Horsepower | Push Button Switch and Overload Switch | TENV | 50/60-1425/1725 | 208-220/440 | 54 | 49-460 |
| | | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 56 | 49-461 |
| | Push Button Switch and Magnetic Starter | TENV | 50/60-1425/1725 | 208-220/440 | 56 | 49-462 |
| | | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 62 | 49-463 |
| | | TENV | 50/60-1425/1725 | 208-220/440 | 62 | 49-464 |

NOTE: Unless otherwise specified, single phase lathes will be wired for 230V and three phase lathes for 280-220V. Power Cord and Plug supplied for single phase lathes only.

machine data
CAPACITY

| | |
|--|------|
| Maximum collet capacity | 1½" |
| Turns any length up to (Self-Indexing) | 6½" |
| Swing over cross slide | 5¼" |
| Swing over bed | 11¼" |
| Max. dia. tool clearance over ram | 3¼" |
| Total ram travel (Manual Indexing) | 7½" |

SPINDLE AND HEADSTOCK

| | |
|--|--------------|
| Infinite stepless speeds in direct drive | 220-1550 rpm |
| Infinite stepless speeds in back gear | 45-250 rpm |
| Spindle dia. at roller bearings | 2¼" |
| Hole through spindle | 1¾" |

BED (furnished with leveling screws)

| | |
|--------|------|
| Length | 49¼" |
| Width | 8¼" |

| | |
|--------------|-----|
| Depth | 5⅞" |
| Width of V's | ¾" |

BED TURRET (for specifications, see CAT. NO. 25-567)

DOUBLE TOOL POST CROSS SLIDE (for specifications, see CAT. NO. 25-555)

COLLET CLOSER—Uses 5-C collets

OVERALL DIMENSIONS

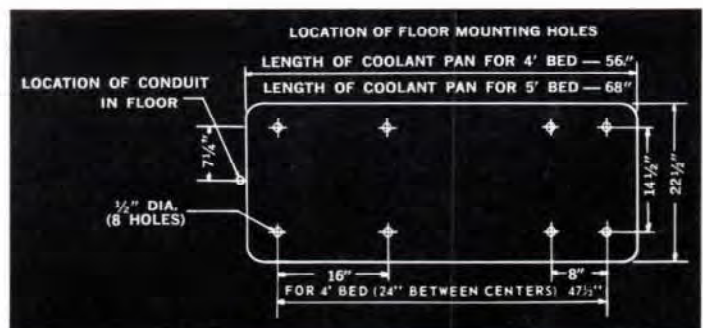
| | |
|---------------------|---|
| Cabinet and machine | 57¼" left to right x 25½" front to rear x 49½" high |
| Coolant pan | 1¼" x 22½" x 56" outside dimensions |
| Drain hole at rear | has ½" pipe tap |

MOTORS

Accommodates NEMA frame motors.....182-184-203-204-224



With the Rockwell-Delta Hand Screw Machine, set-up time is reduced to a minimum. This makes it especially ideal for short production runs of either simple pieces or intricate parts.

floor space requirements


Hand Screw Machine

pays for itself

because it cuts production costs on dozens of operations

like these

14



82.7 PIECES PER HOUR.

STUD (From SAE 1144 Carbon Steel) Operation consists of stopping to length, box turning and threading with the bed turret, chamfering and cutting off to length with the double tool post cross slide.



96 PIECES PER HOUR.

SPECIAL SHAFT (From B-1113 Screw Stock) Steps in this operation are stopping to length with the bed turret and forming and cutting off to length with the cross slide.



35 PIECES PER HOUR.

INDEX PIN (From B-1113 Screw Stock) Operational sequence involves stopping to length with the bed turret, forming with the cross slide, spotting and drilling with the bed turret and cutting off with the cross slide.



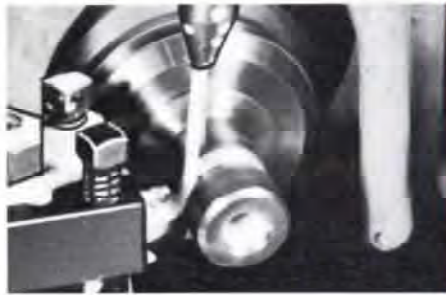
32.5 PIECES PER HOUR.

SPECIAL KNURLED HEAD SCREW (From B-1113 Screw Stock) Consists of stopping to length, box turning, threading and knurling with the bed turret, then forming, making a shoulder and cutting off with the cross slide.



37 PIECES PER HOUR.

KNURLED ADJUSTING NUT (From B-1113 Screw Stock) Phases of this operation are stopping to length, spotting, drilling twice, knurling and reaming with the bed turret, then forming and cutting off with the cross slide.



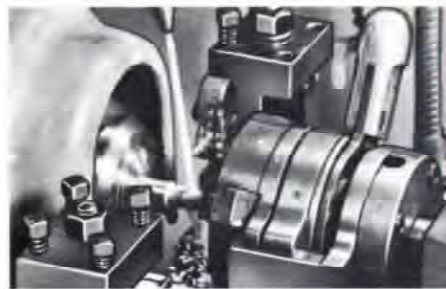
55 PIECES PER HOUR.

SHAFT COLLAR (From B-1113 Screw Stock) Sequence involves stopping to length, spotting, drilling and reaming with the bed turret, then chamfering and cutting off with the cross slide.



28.5 PIECES PER HOUR.

THREADED BUSHING (From B-1113 Screw Stock) Procedure involves stopping to length, spotting, drilling, reaming, turning and threading with the bed turret, then forming and cutting off to length with the cross slide.



31 PIECES PER HOUR.

IDLER STUD (From B-1113 Screw Stock) Operation consists of stopping to length, centering, turning twice and threading with the bed turret, then forming and cutting off with the cross slide.



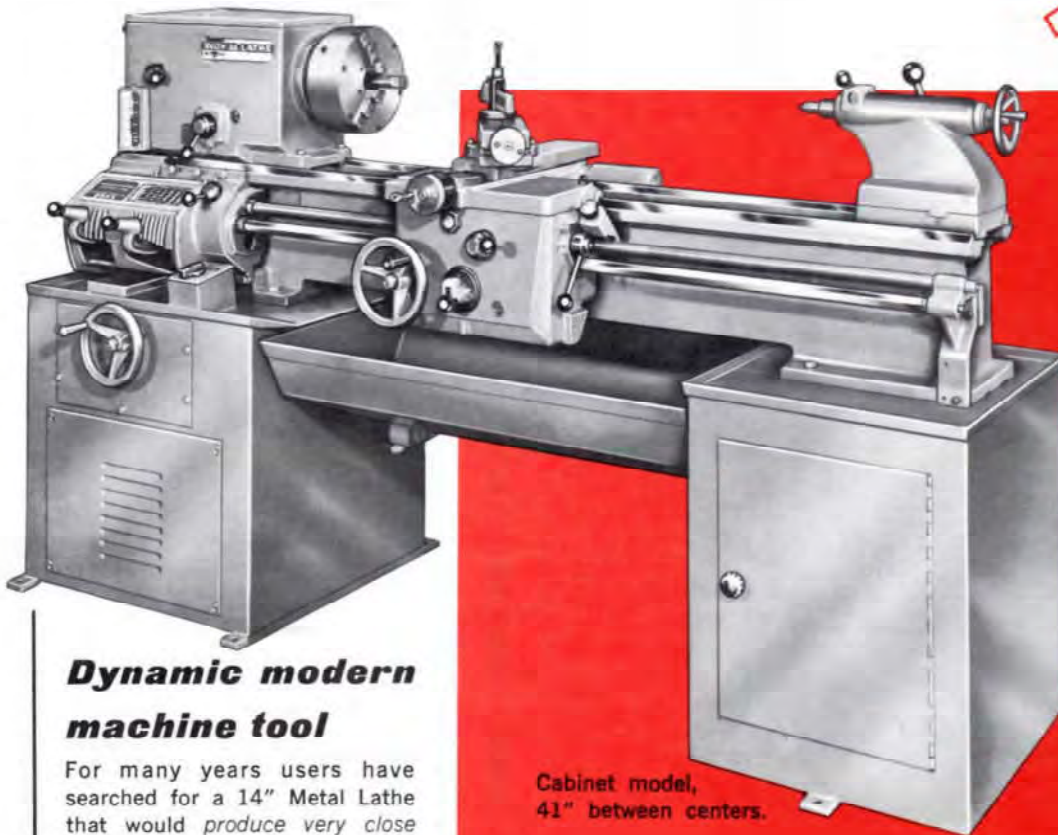
100 PIECES PER HOUR.

HAND KNOB (From B-1113 Screw Stock) Steps in this operation are stopping to length with the bed turret, then forming and cutting off with the cross slide.



ROCKWELL-DELTA

16



14"

METAL LATHES

Dynamic modern machine tool

For many years users have searched for a 14" Metal Lathe that would produce very close tolerance work, that would be easy to operate and that was moderately priced. Delta's 14" Metal Lathe meets all these objectives and more.

It's precision made, yet ruggedly built to produce superior work. It's safety designed to protect the veteran operator or the student trainee. Its operating controls are conveniently located to save the operator's time and make them easy to use. It's the lathe that's in step with modern technology.

Cabinet model,
41" between centers.

Most advanced lathe design in 25 years

The Rockwell Delta 14" Metal Lathe is completely new from headstock to tailstock. EXCLUSIVE FEED REVERSE LEVER, built into the Quick Change Gear Box, can be shifted FORWARD, NEUTRAL OR REVERSE, while the lathe is running. UNIQUE CARRIAGE FEED SELECTOR LEVER can be shifted from longitudinal to cross feed while a cut is being made. DUAL DRIVE FOR CARRIAGE provides a separate rod for all power feeding. PERFECTED VARIABLE SPEED DRIVE incorporates an extra shaft for full power at the spindle and an infinite choice of speeds from 40 to 1600 rpm. See a demonstration of these outstanding features that—up to now—cost you *twice as much!*

STANDARD EQUIPMENT

Cabinet with Chip and Coolant Pan
Two Shelves in Tailstock Pedestal
Quick Change Gear Box
Variable Speed Drive Complete with All Belts
Thread Chasing Dial
Motor Pulley for 3/4", 1/2", 1" or 1 1/4" Shaft
Tool Post, Ring and Rocker

9" Drive Plate
Two 60° Centers (one hard, one soft)
Combination Wrench for Tool Post, Compound Swivel, Carriage Lock, etc.
Spindle Adapter, No. 3 M.T. I.D.
Spanner Wrench for Spindle Nose
Draw Nut (with L-00 Taper Nose)
Lubrication Chart
Instruction and Parts Manual



LATHE / SELECTION GUIDE

14" metal lathes

(Less Electricals)

| BED LENGTH | BED TYPE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|---------------------|----------|------------------------|----------------|
| 30" Between Centers | Standard | 1794 | 25-201 |
| | Hardened | 1794 | 25-211 |
| 41" Between Centers | Standard | 1894 | 25-200 |
| | Hardened | 1894 | 25-210 |

motors and controls MOUNTED AND WIRED

(See Pages 32 and 33 for separate Motors and Controls)

| MOTOR | MOTOR CONTROL | MOTOR ENCLOSURE | CYCLES & MOTOR RPM | VOLTAGE | SHIP. WGHT. (LBS.) | CATALOG NUMBER |
|-------------------------------|--|--------------------|--------------------|-------------|--------------------|----------------|
| Single Phase, Two Horsepower | Drum Switch & Overload Switch | Guarded Drip Proof | 60-1725 | 115/230 | 86 | 49-465 |
| | Drum Switch & Mag. Starter (full V.) | Guarded Drip Proof | 60-1725 | 115/230 | 89 | 49-493 |
| | Drum Switch & Mag. Starter (110V. Trans.) | Guarded Drip Proof | 60-1725 | 115/230 | 103 | 49-494 |
| Three Phase, Two Horsepower | Drum Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 70 | 49-466 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 70 | 49-467 |
| | Drum Switch and Magnetic Starter (full voltage type) | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 73 | 49-495 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 73 | 49-496 |
| | Drum Switch and Magnetic Starter (w/110V. transformer) | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 87 | 49-497 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 87 | 49-498 |
| Three Phase, Three Horsepower | Drum Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 105 | 49-468 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 105 | 49-469 |
| | Drum Switch and Magnetic Starter (full voltage type) | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 108 | 49-499 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 108 | 49-504 |
| | Drum Switch and Magnetic Starter (w/110V. transformer) | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 122 | 49-470 |
| | | TEFC | 50/60-1425/1725 | 208-220/440 | 122 | 49-471 |

NOTE: Three phase lathes will be wired for 208-220V, unless 440V is specified. Single phase lathes will be wired for 230V only. Power Cord from electrical outlet to lathe is not supplied.

machine data

- CAPACITY**
 Swing over bed and saddle wings 14 1/4"
 Swing over cross slide 9 1/8"
 Between centers (tailstock completely on bed) 30" x or 41"
 Hole through spindle 1 3/8"
 Maximum capacity with 5-C style collet 1 1/4"
- SPINDLE SPEEDS (with 1725 rpm motor)**
 Infinite choice of speeds in direct drive 210-1600 rpm
 Infinite choice of speeds in gear drive 40-265 rpm
- THREADS AND FEEDS**
 Quick change gear box has 54 thread changes L.H. or R.H. 4, 4 1/2, 5, 5 1/2, 5 3/4, 6, 6 1/2, 6 3/4, 7, 8, 9, 10, 11, 11 1/2, 12, 13, 13 1/2, 14, 16, 18, 20, 22, 23, 24, 26, 27, 28, 32, 36, 40, 44, 46, 48, 52, 54, 56, 64, 72, 80, 88, 92, 96, 104, 108, 112, 128, 144, 160, 176, 184, 192, 208, 216, 224.
 Lead Screw (no keyway) 1" dia. Acme x 8 t.p.i.
 Feed Rod 3/4" hex.
 Longitudinal Feeds 54 feeds from .0017" to .099"
 Cross Feeds 54 feeds from .00089" to .052"
- HEADSTOCK**
 Back Gears (Run in oil) 6 to 1 ratio
 Spindle (Heat treated and ground alloy steel)
 Has three precision ball bearings.
 Two outboard bearings are single row 3 1/8" O.D.
 Inboard bearing is double row 5 1/8" O.D.
 Center used No. 3 M.T.
 Taper Hole in Nose Mod. No. 5 M.T.
 Spindle Nose: Standard—Long Taper Key Drive, size L-00
 Drive Variable Speed, plus outboard twin V-belts
- CARRIAGE**
 Length of saddle V-way 16"
 Width of saddle bridge 5 1/4"
 Cross slide travel 8"
 Compound slide travel 4 3/4"
 Tool Post Opening (takes standard tool holders for 3/8" bits) 1 1/4" x 1 7/8" Compound
 Slide graduated 90° in both directions, with three witness marks
 Apron double wall, oil bath type

TAILSTOCK (has automatic center ejection)

- Ram diameter 1 13/16"
 Ram travel 5 1/2"
 Length of graduations marked on ram by 1/16ths 5 1/2"
 Center used No. 3 M.T.
 Handwheel adjustable micrometer collar graduated in .001"
 Method of clamping Lever and Cam
 Set-over (either direction) 3/4"

BED (choice of standard or hardened)

- Length 63" or 74"
 Width 9 5/8"
 Depth 9 1/2"
 Width of V's 1"
 Has two prismatic V-ways and two flat ways (precision ground).

OVERALL DIMENSIONS

- Cabinet and Machine 75 or 86" left to right x 25" front to rear x 48" high
 Chip and Coolant Pan (detachable) has 1/2" pipe tap

MOTORS

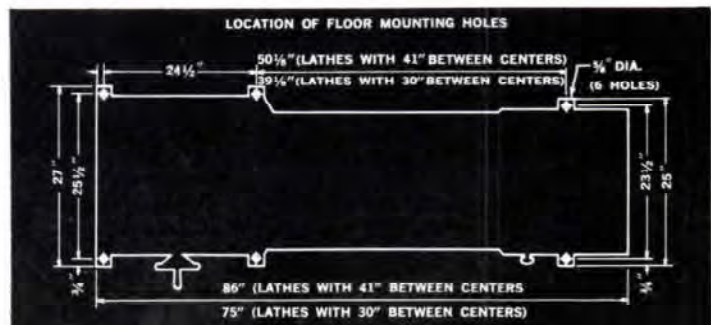
- Accommodates NEMA frame motors 184, 213, 215
 Horsepower recommended 2
 Speed recommended 1725 rpm



All Rockwell-Delta 14" Metal Lathes are available with flame hardened bed ways that assure longer wearing qualities and added protection against denting and scoring. Ways are flame hardened, then precision ground with diamond-dressed wheel on special, precision, way-grinding equipment.

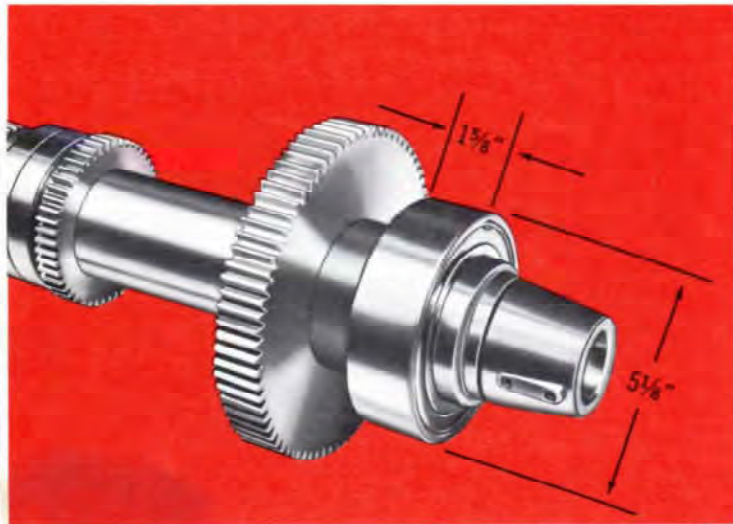
Flame hardened bed ways are highly recommended wherever Rockwell-Delta 14" Lathes are to be used for machining materials that produce chips or dust that may have an abrasive action on the ways. Flame hardening assures continued original accuracy of the bed ways, even under the stress of repetitive production operations.

floor space requirements



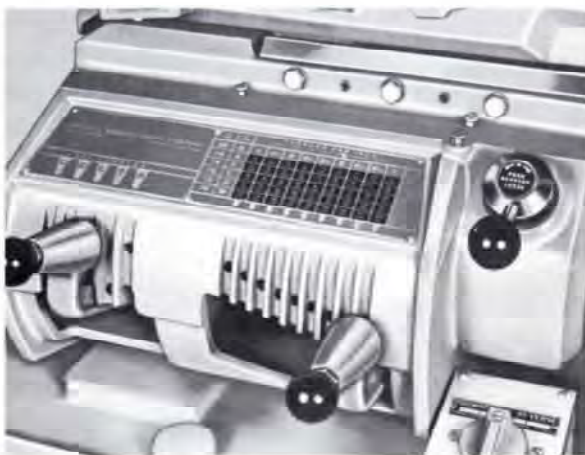
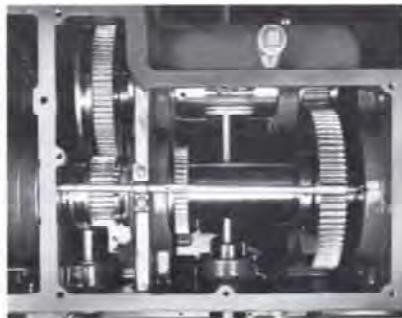


18



MASSIVE HEADSTOCK HAS GEARS AUTOMATICALLY PROTECTED

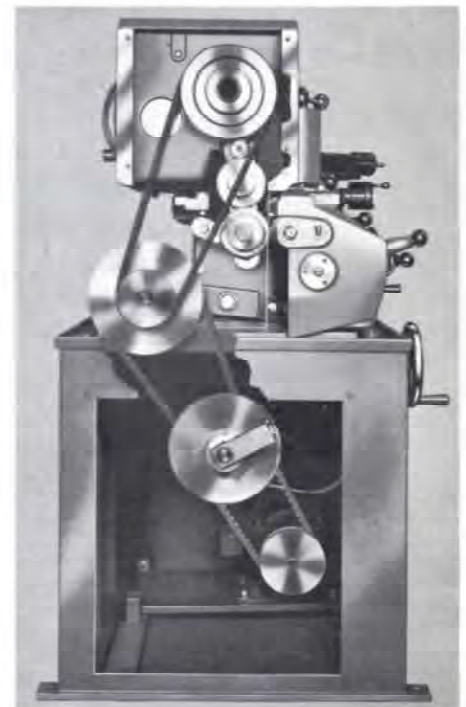
A positive lock-out makes it impossible to engage the back gears while in direct drive or to engage direct drive while in back gears. All gears are bathed and showered with circulating oil. Outboard twin V-belts are quickly accessible for easy tensioning or changing. Chatter-free cutting is assured by the over-sized spindle and the massive, double row, internally pre-loaded spindle nose bearing.



QUICK CHANGE GEAR BOX WITH EXCLUSIVE FEED REVERSE LEVER

Gear box provides a choice of 54 thread pitches (including 27 threads per inch) by means of two selector levers, with rugged, needle bearing equipped tumbler gears. A unique feature is that the Feed Reverse Lever, built into the Quick Change Gear Box, convenient to the operator's hand, can be shifted (forward—neutral—reverse) while the lathe is running.

these features make the Rockwell-Delta 14" Lathe the most modern... most productive lathe in its class



PERFECTED VARIABLE SPEED DRIVE

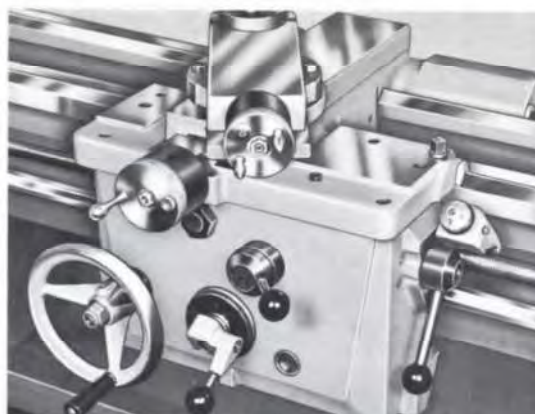
You get all the advantages of a variable speed drive, with an infinite choice of speeds from 40 to 1600 rpm—PLUS the high torque transmitting power of matched V-belts. The Delta variable speed drive incorporates an *extra shaft* between the variable speed drive pulley and spindle. This makes possible high speed power transmission through the variable speed drive belts while twin V-belts transmit steady power to the spindle. *You get all this with no unobtainable speeds in the mid range.*

A special feature are the lubricated-for-life ball bearings in the spindle pulley, upper jackshaft pulley and variable speed drive pulley. This excellent construction guarantees you *longer machine life, more efficient power transmission, eliminates the need for lubrication and makes speed changes easy.*



DUAL DRIVE FOR CARRIAGE

A separate rod is used for all power feeding. The solid lead screw (used for threading only) has no keyway to cause wear on the half-nuts . . . new machine threading accuracy is maintained. Furthermore, production time is saved because the feed rod and the lead screw are quickly and simultaneously reversed, WHILE THE LATHE IS RUNNING.

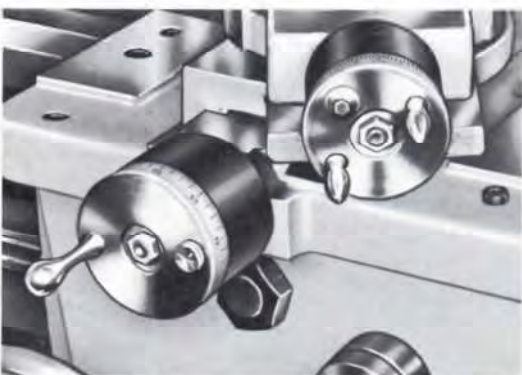


MODERN CARRIAGE HAS CONVENIENT CONTROLS

The large apron handwheel with its "loose" handle, the fast-action clutch lever, the unique feed selector lever, and the lever for half-nuts, all have been designed with the operator in mind.

A unique feature of the feed selector is that it can be shifted from longitudinal feed to cross feed while a cut is in progress, facilitating the turning, then facing of multiple diameter work with shoulders.

A lock-out feature prevents the simultaneous setting for power feeding and threading.



LARGE, DIRECT READING MICROMETER COLLARS

The large size of the micrometer collars for the compound and the cross slide makes them easy to read. Both are of the modern, direct reading type and have a "zero start" feature which makes mental calculations unnecessary. Both are provided with lock knobs to avoid accidental slippage of the collars. Adjusting the sleeves enables the witness marks to be set at whichever viewing angle the operator finds most convenient.

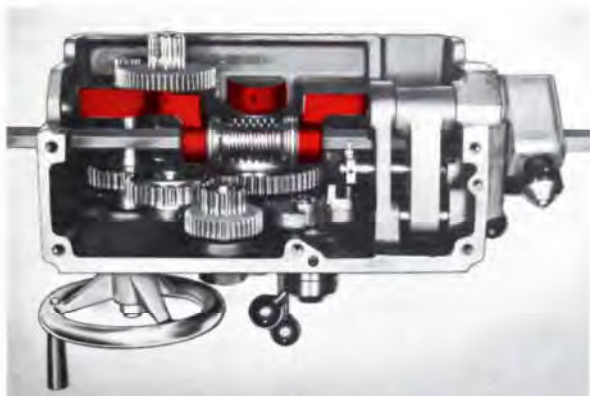


EXTRA DEEP, SOLID WALL BED GUARANTEES MAXIMUM ACCURACY

The strongest "backbone" of any lathe in its class is provided by this heavy massive bed. It is 9 $\frac{3}{4}$ " wide and more than 9" deep. The bracing is stress engineered to guarantee permanent accuracy. V and flat ways are precision ground with the most modern way grinding equipment.

RUGGED TAILSTOCK LOCKS BY PREFERRED CAM-ACTION CONTROL

Lathe operators appreciate the quick-acting cam lock that clamps the tailstock to the bed, also the easy accessibility of the ram clamp lever. A large micrometer collar with .001" decimal graduations is provided for the handwheel in addition to the $\frac{1}{16}$ " graduations on the ram. The tailstock has an off-set feature for taper turning, an ejection feature for centers and wipers for both V and flat ways.



DOUBLE WALL, OIL BATH TYPE APRON ASSURES PROPER LUBRICATION

The steel gears are always well lubricated by dipping into the reservoir of oil. Proper oil level is indicated by the sight gage provided.

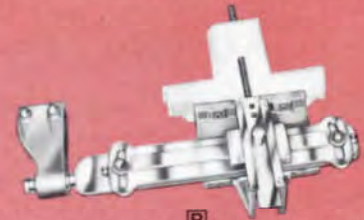
Notice the close-coupled rear wall support for rigid alignment of the gears. Notice also the separate rod for power feeding. Thread chasing dial is standard equipment.



ROCKWELL-DELTA
10TH
METAL
LATHE
ACCESSORIES



A



B



C



D



E



F



G



H



I



J



K



L



M



N



THESE ACCESSORIES MAKE THE ROCKWELL-DELTA

A METRIC TRANSPOSING GEAR KIT...Includes 127-tooth transposing gear, six stud gears, front and rear guards, miscellaneous parts, instructions for field mounting and chart showing 33 standard metric thread pitches from .20 to 6.0 MM. 24 lbs. **NO. 25-875**

B TAPER ATTACHMENT...Turns or bores tapers up to 8 1/4" long, with 1 1/4" maximum cross travel of tool at one setting. One end of swivel slide is calibrated for tapers up to 3 1/2" per foot on dia. and other end of swivel slide is calibrated up to 16" included angle. Telescopic design of cross feed screw permits hand feed to be used to bring tool to required work dia., even when set for taper operations. It is not necessary to disconnect cross feed screw to change from straight to taper turning. Includes telescopic cross feed screw and shaft and complete instructions for mounting in customer's shop. 40 lbs. **NO. 25-856**

C STEADY REST...With 3" diameter of work capacity. Top half is hinged for easy loading. 12 lbs. **NO. 25-852**

D FOLLOWER REST...With 3" diameter of work capacity. Includes bolts for mounting to saddle. 10 lbs. **NO. 25-850**

E 6" DRIVE PLATE...Has two 3/4" opposed slots for driving lathe dogs. 4 lbs. **NO. 25-840**

F 9" FACE PLATE...Has eight 3/8" x 2 1/4" slots for clamping work. 14 lbs. **NO. 25-839**

G PLAIN CARRIAGE STOP...Used on either side of carriage to provide a positive longitudinal feed stop for cutting shoulders, etc. Includes parts for mounting on front V-way of bed. 2 lbs. **NO. 25-853**

H MICROMETER CARRIAGE STOP...Used on either side of carriage to provide a positive longitudinal feed stop for cutting shoulders, etc. Micrometer collar is graduated in .001", provides accurate setting, is self locking by means of a unique spring lock feature. Includes parts for mounting on front V-way of bed. 2 1/2 lbs. **NO. 25-854**

I THREAD STOP...Makes thread cutting faster, easier; limits the forward travel of cross slide against a positive, adjustable stop. Clamps on dovetail of saddle in front of cross slide. 1 1/2 lbs. **NO. 25-830**

J DRILL CHUCK...3-Jaw, Key Type, 0-3/2" capacity, with No. 2 Morse Taper shank. Includes chuck key. 2 1/2 lbs. **NO. 968**

K LATHE CHUCK, 5"...3-Jaw Type, back threaded 1 1/2"-8. For internal or external holding up to approx. 4" in dia. Runs in good balance and has a minimum of overhang. Includes three internal and three external jaws and wrench. 8 lbs. **NO. 25-870**

L LATHE CHUCKS, 6"...4-Jaw Type for internal or external holding up to approx. 5" in dia. Run in good balance and have a minimum of overhang. Jaws are hardened.

Economy Type...Back threaded 1 1/2"-8. Jaw screws are heat treated to provide long life. Includes wrench and one set of reversible jaws. 9 lbs. **NO. 25-873**

Deluxe Type...Jaw screws and thrust bearings are heat treated to provide long life. Includes one set of jaws reversible for internal or external work, fitted chuck plate threaded 1 1/2"-8 and wrench. 18 lbs. **NO. 25-874**

N JACOBS MODEL 50 COLLET CHUCK...Used with Jacobs Series 500 Rubber-Flex Collets, it offers these advantages. It's completely safe—there are no jaws flying around to damage the tool holder. It has tremendous gripping power for heavy-duty turning. It's accurate—maximum runout is .001" T.I.R. at the spindle nose. It's ideal for thin-walled tubing and fragile work—the always parallel Model 50 Rubber-Flex Collet jaws permit excellent chucking of tubing and fragile materials. Scoring of O.D. is reduced to a minimum. Chuck, complete with adapter for mounting on 1 1/2"-8 threaded spindle nose models, hex wrench and instructions. Without collets. 10 3/4 lbs. **NO. 25-835**

N JACOBS SERIES 500 RUBBER-FLEX COLLETS...Used with the Jacobs Model 50 Collet Chuck, these economical collets cover a greater bar stock range than with 63 steel collets. They enable you to chuck any bar between 3/32" and 1-1/16". They provide full, through spindle capacity—15/16" I.D. They provide greater accuracy. When closing down the collet throughout the entire .100" range, perfect parallelism is maintained between the extra long collet bearing surfaces. The work pressure and gripping pressure are constant throughout the entire collet range.

| Quantity | Capacity (Inches) | Capacity (Metric) | Cat. No. |
|-----------|-------------------|-------------------|---------------|
| One | .10—.20 | 2.5—5.1 mm | 25-281 |
| One | .20—.30 | 5.1—7.6 mm | 25-282 |
| One | .30—.40 | 7.6—10.2 mm | 25-283 |
| One | .40—.50 | 10.2—12.7 mm | 25-284 |
| One | .50—.60 | 12.7—15.2 mm | 25-285 |
| One | .60—.70 | 15.2—17.8 mm | 25-286 |
| One | .70—.80 | 17.8—20.3 mm | 25-287 |
| One | .80—.90 | 20.3—22.9 mm | 25-288 |
| One | .90—1.00 | 22.9—25.4 mm | 25-289 |
| One | 1.00—1.06 | 25.4—27 mm | 25-290 |
| Set of 10 | .10 to 1.06 | 2.5 to 27 mm | 25-280 |

O DRAW BAR FOR COLLETS...Has hardened threads. Ball thrust bearing transmits tremendous gripping power to collet, yet the bar is easy to tighten or release. Includes 4 1/2" hand wheel, spindle nose cap and spanner wrench. 8 lbs. **NO. 25-825**

P STEEL COLLETS...Self-releasing type for holding round stock. Heat treated and hardened.

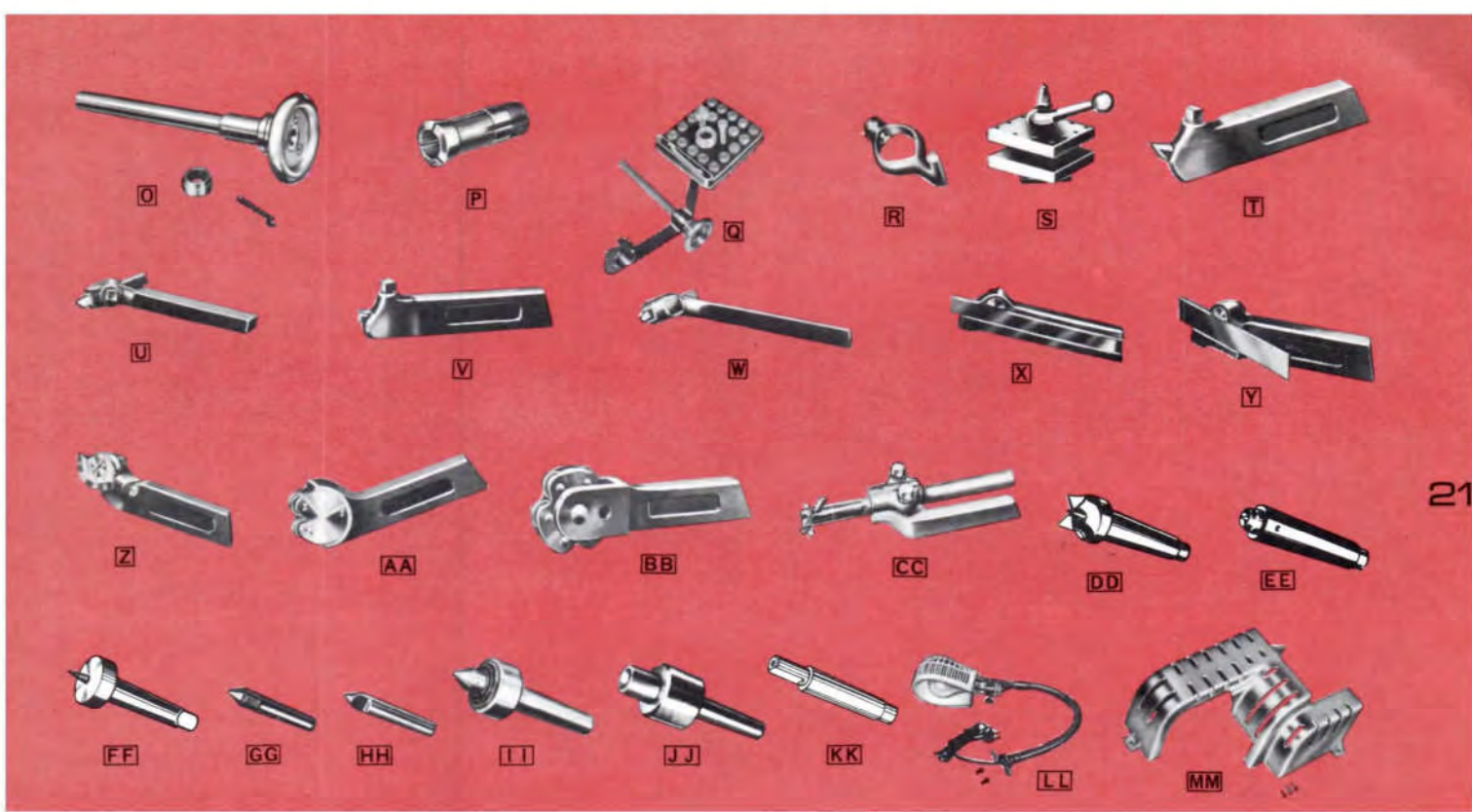
| Quantity | Capacities | Wt., Lbs. | Cat. No. |
|----------|--|-----------|---------------|
| Set of 6 | 1/4" to 3/8" by 16ths | 4 | 25-800 |
| Set of 6 | 3/8" to 1/2" by 16ths | 4 | 25-810 |
| One | 1/4" to 1/2" by 64ths (Specify No. 25-812 and size desired.) | 1/2 | 25-812 |

Q RACK FOR STEEL COLLETS...Holds 19 collets, 2 centers, spindle nose cap, spanner wrench and draw bar. Mounts on lathe bed. 12 lbs. **NO. 25-828**

R SAFETY TYPE LATHE DOGS...Bent tail-type. Made of forged, selected steel. Include socket screw and wrench.

| Capacity, in. | Wt., Lbs. | Cat. No. |
|---------------|-----------|---------------|
| 3/8 | 3/2 | 25-861 |
| 1/2 | 3/2 | 25-862 |
| 3/4 | 3/2 | 25-863 |
| 1 | 3/4 | 25-864 |
| 1 1/4 | 3/4 | 25-865 |
| 1 1/2 | 3/4 | 25-866 |

FOR BED TURRET AND COOLANT EQUIPMENT, SEE PAGE 25.



10" METAL LATHE EVEN MORE VERSATILE

[S] TURRET TOOL POST FOR COMPOUND... For facing, turning, thread cutting, boring, etc. 2 1/2" square head takes four 3/8" tool bits. Indexing feature provides 12 positions—3 for each tool. 30° position can be used for threading. 10 lbs. **NO. 25-851**

TOOL HOLDERS... Drop forged from special steel, heat treated and hardened, with set screw and wrench.

| Type | Shank Size | Bit or Blade Size | Bit or Blade Furnished | Wt., Lbs. | Cat. No. |
|---|--------------|-------------------|------------------------------|-----------|----------|
| [T] Straight | 3/8 x 7/8" | 1/4 x 1/4" | HSS Bit | 3/4 | 25-680 |
| [U] Right-hand Off-set | 3/8 x 7/8" | 1/4 x 1/4" | HSS Bit | 3/4 | 25-681 |
| Left-hand Off-set | 3/8 x 7/8" | 1/4 x 1/4" | HSS Bit | 3/4 | 25-682 |
| [V] Straight Carbide | 3/8 x 1 1/4" | 1/4 x 1/4" | None | 7/8 | 25-689 |
| [W] Right-hand Off-set Carbide | 3/8 x 1 1/4" | 1/4 x 1/4" | None | 7/8 | 25-690 |
| Left-hand Off-set Carbide | 3/8 x 1 1/4" | 1/4 x 1/4" | None | 7/8 | 25-691 |
| [X] Straight Cutting-Off and Side | 3/8 x 3 1/2" | 3/2 x 3/8" | HSS Blade (ground both ends) | 3/4 | 25-683 |
| [Y] Right-hand Off-set Cutting-Off and Side | 3/8 x 3 1/2" | 3/2 x 3/8" | HSS Blade (ground both ends) | 3/8 | 25-684 |
| Left-hand Off-set Cutting-Off and Side | 3/8 x 3 1/2" | 3/2 x 3/8" | HSS Blade (ground both ends) | 7/8 | 25-685 |

[Z] THREADING TOOL... 3/8" x 3/8", includes formed cutter for pitches 6 to 20. 3/4 lb. **NO. 25-686**

[AA] KNURLING TOOL... 3/8 x 3/8", self-centering head, with one pair of medium diamond knurls 3/16" face by 3/8" diameter. 3/4 lb. **NO. 25-687**

[BB] KNURLING TOOL... 3/8 x 3/8", revolving head, with three pairs of fine, medium, coarse diamond knurls 3/16" face by 3/8" dia. 1 lb. **NO. 25-688**

[CC] BORING TOOL... Takes bars of various diameters. The sleeve-bar clamping feature is exceptionally strong and provides for rapid adjustment of either straight or angular cutters without the need for extra parts. 3/4 x 3/8", for bars 1/4" to 3/8" in diameter, includes one 45° and one 90° cutter, two wrenches and one 3/8" diameter sleeve-bar. 2 3/8 lbs. **NO. 25-692**

CUTTING-OFF BLADE... 3/32 x 3/8", made of HSS, ground and ready for use in tool holders Nos. 25-683, 25-684 and 25-685. 2 lbs. **NO. 25-695**

FORMED THREADING CUTTER... Sharp 60° V-thread, for pitches 6 to 20 inclusive, fits No. 25-686 Threading Tool. 2 lbs. **NO. 25-696**

CENTERS... High quality type. With No. 2 M.T. shank.

| Type | Recommended Use and Description | Wt., Lbs. | Cat. No. |
|-------------------|--|-----------|----------|
| [DD] Spur Drive | For wood turning, 1 1/8" dia. head. Shank tapped 1/4"-20 for draw bolt. Includes 3/4 x 1 1/2" replaceable center point. | 3/4 | 933 |
| [EE] Cup Dead | For wood turning. Includes 3/4 x 1 1/2" replaceable center point. | 3/4 | 934 |
| [FF] Screw Center | For wood turning, 1 1/2" dia. head. Shank tapped 1/4"-20 for draw bolt. Includes one No. 8 and one No. 14 replaceable wood screw center point. | 1/2 | 940 |
| [GG] 60° | For headstock. Soft and ground. | 1/2 | 25-542 |
| 60° | For tailstock. Hardened and ground, with annular groove. | 1/2 | 25-841 |
| [HH] 60° Half | For tailstock. Hardened and ground. | 1/2 | 25-843 |
| [II] 60° Live | Pointed, for tailstock. Heat treated, hardened and ground point is accurate with little overhang. Can be reground by belting to the revolving head. Head is carried on an angular contact pre-loaded ball bearing. | 1 1/2 | 25-844 |
| [JJ] 60° Live | Hollow, for tailstock. Heat treated, hardened and ground cup is accurate with little overhang. Can be reground by belting to the revolving head. Head is carried on an angular contact pre-loaded ball bearing. | 1 1/2 | 25-845 |

[KK] ARBOR... No. 2 M.T. shank. Has 1/2 x 1 1/8" end, with flat. 3/8 lb. **NO. 935**

[LL] LAMP ATTACHMENT... With 15" flexible gooseneck. Includes nylon shield, mounting bracket, switch and 8-ft. cord with 2-prong plug. Uses standard bulb (not included) up to 100 watts. 2 lbs. **NO. 25-857**

[MM] BELT AND PULLEY GUARD... Aluminum, with 3/8" Slots. Recommended when motor is mounted at rear on wooden bench. 7 lbs. **NO. 25-859**

FOR BED TURRET AND COOLANT EQUIPMENT, SEE PAGE 25.



FOR ROCKWELL-DELTA 11" METAL LATHES

AA ROUGH CHUCK PLATES . . . Machined to fit 2 1/4" -8 or L-00 tapered nose. These are high quality cast iron plates with enough stock left to be fitted to chucks requiring 6" or 8" diameter chuck plate. Without holes for mounting chuck.
 6" for 2 1/4" -8 threaded nose. 11 lbs. NO. 25-590
 6" for L-00 tapered nose. 9 lbs. NO. 25-591
 8" for 2 1/4" -8 threaded nose. 18 lbs. NO. 25-592
 8" for L-00 tapered nose. 16 lbs. NO. 25-593

BB 7" DRIVE PLATES . . . With slot for driving dogs and three work clamping slots.
 For 2 1/4" -8 threaded nose. 6 lbs. NO. 25-640
 For L-00 tapered nose. 7 lbs. NO. 25-642

CC 10" FACE PLATES . . . With eight 3/8" x 2 1/2" work clamping slots.
 For 2 1/4" -8 threaded nose. 13 lbs. NO. 25-644
 For L-00 tapered nose. 13 lbs. NO. 25-646

SAFETY TYPE LATHE DOGS . . . Bent-tail type. Made of forged, selected steel with hubs large enough to permit re-tapping. Include hexagon socket safety screw and wrench.

| Capacity, In. | Wt., Lbs. | Cat. No. |
|---------------|-----------|----------|
| DD 3/8" | 1/2 | 25-661 |
| EE 1/2" | 1/2 | 25-662 |
| FF 3/4" | 1 | 25-663 |
| GG 1" | 1 1/4 | 25-664 |
| HH 1 1/4" | 2 | 25-665 |
| II 1 1/2" | 2 1/4 | 25-666 |

JJ ARBOR . . . For shell end mills with 1/2" hole, No. 3 Morse Taper shank, tapped 3/16" -18 for draw bolt, with mounting screw. 1 lb. NO. 25-521

KK ARBOR . . . For plain milling cutters with 1" hole up to 1 1/2" wide, No. 3 Morse Taper shank, tapped 3/16" -18 for draw bolt, includes spacing collars, key, and nut. 2 lbs. NO. 25-526

LL COLLET CHUCK . . . For Woodruff keyseat cutters with 1/2" shank, No. 3 Morse Taper shank, tapped 3/16" -18 for draw bolt, with nut. 2 lbs. NO. 25-527

TOOL HOLDERS . . . Drop forged from special steel, heat treated and hardened, with set screw and wrench.

| Type | Shank Size | Bit or Blade Size | Bit or Blade Furnished | Wt., Lbs. | Cat. No. |
|--|--------------|-------------------|------------------------------|-----------|----------|
| MM Straight | 1/2 x 1 1/8" | 3/16" x 3/16" | HSS Bit | 2 | 25-671 |
| NN Right-Hand Off-set | 1/2 x 1 1/8" | 3/16" x 3/16" | HSS Bit | 2 | 25-672 |
| Left-Hand Off-set | 1/2 x 1 1/8" | 3/16" x 3/16" | HSS Bit | 2 | 25-673 |
| OO Straight Carbide | 1/2 x 1 1/8" | 3/16" x 3/16" | None | 2 | 25-677 |
| PP Right-Hand Off-set Carbide | 1/2 x 1 1/8" | 3/16" x 3/16" | None | 2 | 25-678 |
| Left-Hand Off-set Carbide | 1/2 x 1 1/8" | 3/16" x 3/16" | None | 2 | 25-679 |
| QQ Straight Cutting-Off and Side | 1/2 x 1 3/8" | 1/8" x 1/4" | HSS Blade (ground both ends) | 2 | 25-674 |
| RR Right-Hand Off-set Cutting-off and Side | 1/2 x 1 3/8" | 1/8" x 1/4" | HSS Blade (ground both ends) | 2 | 25-675 |
| Left-Hand Off-set Cutting-off and Side | 1/2 x 1 3/8" | 1/8" x 1/4" | HSS Blade (ground both ends) | 2 | 25-676 |

SS SCREW ARBOR . . . For single angle (dovetail) milling cutters, threaded 3/8" -24 R. H., No. 3 Morse Taper shank, tapped 3/16" -18 for draw bolt. 1 lb. NO. 25-522

SCREW ARBOR . . . Same as No. 25-522 except, threaded 1/2" -20 R. H. 1 lb. NO. 25-524

SPINDLE ADAPTER . . . No. 3 M.T. i.d. For mounting milling arbors Nos. 25-521, 25-522, 25-524 and 25-526, collet chuck No. 25-527, or drill chuck No. 17-820. Also may be used for grinding a new point on the 25-541 60° center for tailstock. 2 lbs. NO. 25-520

TT DRAW BOLT . . . For arbors and collet chucks, threaded 1/4" -18, with bushing, washer and nut. 2 lbs. NO. 25-528

THREADING TOOLS . . . The tool holders are drop forged from special steel, heat treated and hardened. The HSS cutter is ground to an included angle of 60°, and backed off for proper clearance. Cutter is sharpened by grinding top edge only; therefore true form and correct angle are maintained. A hardened stop screw provides for positive, easy adjustment of cutter after sharpening.

UU THREADING TOOL . . . 1 1/2" x 1 1/8". Includes formed cutter for pitches 5 to 20 inclusive. 2 lbs. NO. 25-667

KNURLING TOOLS . . . Knurls and pins are carefully made from high grade tool steel, hardened and tempered. Teeth of knurls are accurately cut concentric to hole, to assure quality knurling of work piece. Holders are hardened.

VV KNURLING TOOL . . . 1/2" x 1 3/8", self-centering head, with one pair of medium diamond knurls 1/4" face by 3/4" diameter. 2 lbs. NO. 25-668

WW KNURLING TOOL . . . 1/2" x 1 1/8", revolving head, with three pairs of fine, medium and coarse diamond knurls 1/4" face by 3/4" diameter. 2 lbs. NO. 25-669

BORING TOOLS . . . Unique design of holder takes bars of various diameters without sleeves or bushings. The sleeve-bar clamping feature is exceptionally strong and provides for rapid adjustment of either straight or angular cutters without the need for extra parts.

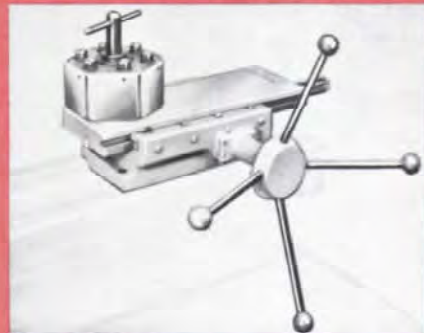
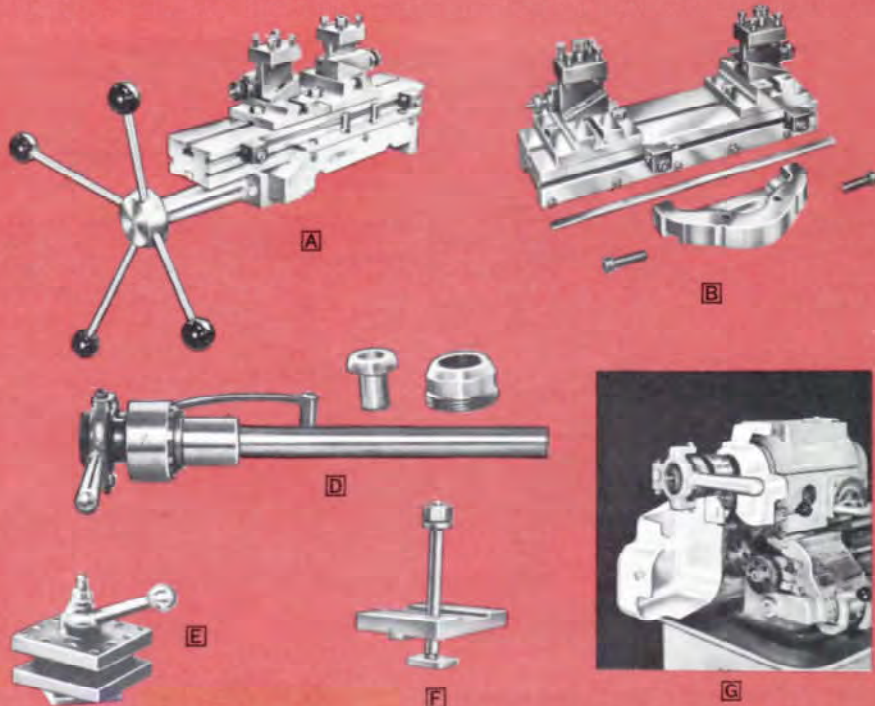
XX BORING TOOL . . . 1/2" x 1 1/8", for bars 1/4" to 3/4" in diameter, includes one 45° and one 90° cutter, two wrenches, and one 3/4" diameter sleeve-bar. 5 lbs. NO. 25-693

REPLACEMENT BLADE AND CUTTER

YY CUTTING-OFF BLADE . . . 1/8" x 3/4", made of high speed steel, ground and ready for use in tool holders Nos. 25-674, 25-675 and 25-676. 2 lbs. NO. 25-694

ZZ FORMED THREADING CUTTER . . . sharp 60° V-thread, for pitches 5 to 20 inclusive, fits No. 25-667 Threading Tool. 2 oz. NO. 25-698

AAA LAMP ATTACHMENT . . . 8 watt, 115V, 60 cy., fluorescent type. Provides brilliant, cool, directed (head rotates 330°) light without glare. Includes chip shield, on and off switch, two 4-watt bulbs, 18" gooseneck, bracket for mounting to carriage and 6' power cord with 2-prong plug. 4 lbs. NO. 25-657



THESE ACCESSORIES CONVERT STANDARD ROCKWELL-DELTA 11" LATHES FOR PRODUCTION WORK

Delta's Bed Turret, Double Tool Post Cross Slides and Lever Type Collet Closer are engineered to fit all standard Rockwell-Delta 11" Lathes. To convert your standard Rockwell-Delta 11" Lathes for screw machine or turret lathe work, you simply install the above accessories and remove the carriage and tailstock assemblies. You also should add other accessories as required, such as coolant equipment, guards, etc.

DOUBLE TOOL POST CROSS SLIDES

These deluxe, heavy-duty Double Tool Post Cross Slides, especially when used with the Bed Turret, convert your Rockwell-Delta 11" Engine Lathe to do much of the work usually accomplished on a turret lathe or hand screw machine. They are ideal for repetitive, high-production manufacturing of a wide variety of parts ranging from simple pieces such as washers and shafts to the most intricate parts as used in the electronics and aircraft industries.

T-slots in tool post pads and in slide provide transverse and longitudinal adjustment for accurate positioning of tool bits. The hardened steel tool posts have left and right tool positions, sliding wedge height adjustment, and set screws to permit slight rotation of tool bits in a horizontal plane so that either angular or straight tool settings can be perfectly maintained.

MACHINE DATA

| Slide: | No. 25-555 | No. 25-556 |
|-------------------------------|------------|------------|
| Travel..... | 8" | 5 3/4" |
| Length..... | 17 1/2" | 15 1/4" |
| Width..... | 3 1/2" | 4 1/4" |
| Maximum Swing Over Slide..... | 5 3/8" | 5 3/8" |
| Tool Posts: | | |
| Size of Bit..... | 3/8" sq. | 3/8" sq. |
| Tool Bit Slot: | | |
| Depth..... | 1/8" | 1/8" |
| Height..... | 1 3/4" | 1 3/4" |
| Tool Height Adjustment..... | 1/4" | 1/4" |
| Distance Between Tool Posts: | | |
| Maximum..... | 11" | 8 3/4" |
| Minimum..... | 2" | 2" |
| Adjustment of Tool Posts: | | |
| Longitudinal..... | 1 3/4" | 2 1/2" |
| Transverse..... | 9" | 6 3/4" |

A **BED MOUNTED DOUBLE TOOL POST CROSS SLIDE WITH PILOT WHEEL FEED.** The extra long (8") travel of this slide permits the tool posts to be positioned far apart so that even large tooling in the bed turret can be fed in between the tool posts of the cross slide. Has the speed and convenience of a lever type slide but is much safer because the operator's hands never need approach the work while feeding the tool bits. Slide traverses 4" for each revolution of the pilot wheel.

This cross slide is supplied as standard equipment with the Hand Screw Machine. 80 lbs. **NO. 25-555**

B **SADDLE MOUNTED DOUBLE TOOL POST CROSS SLIDE.** This slide replaces the compound slide rest and regular cross slide of the 11" engine lathe. It mounts on the saddle dovetail of the regular lathe carriage and utilizes the cross feed lead screw regularly supplied with the lathe. It may be operated by power through the friction clutch in the apron or manually with the regular hand-wheel.

The taper attachment may be left on the lathe, if desired, when this cross slide is mounted. Includes complete instructions for easy field mounting by the user. 40 lbs. **NO. 25-556**

C **BED TURRET** (furnished as standard equipment with Hand Screw Machine). This heavy duty, self-indexing, precision bed turret with six-station head, converts your Rockwell-Delta engine lathe into a ram-type turret lathe for production work requiring multiple machining operations. It will also simplify many single operations normally done on an engine lathe. The turret can be used to advantage on bar stock fed through the spindle or for primary or secondary operations on individually chucked parts.

Tool holes are blank so that they can be machined by user for perfect alignment with spindle hole. Complete instructions for machining holes and mounting turret are furnished. 120 lbs. For machine data, see Page 25. **NO. 25-567**

D **LEVER TYPE BALL BEARING COLLET CLOSER** (furnished as standard equipment with Hand Screw Machine). Used with all 5-C collets—round, square, hex, step, soft, internal, external, etc. Takes bar stock up to 1 1/4" diameter. Includes mounting bracket with bolts, collet sleeve and spindle nose cap. Spanner wrench is supplied for threaded nose models.

For 2 1/4"—8 threaded nose lathes. 16 lbs. **NO. 25-553**
For L-00 tapered nose lathes. 15 lbs. **NO. 25-554**

E **TURRET TOOL POST FOR COMPOUND OR DOUBLE TOOL POST CROSS SLIDES.** For facing, turning, thread cutting, drilling, boring and other operations. 3 1/2" square head takes four 1/2" or smaller cutter bits. Indexing feature provides 12 positions—3 for each tool. 30° position can be used for threading. 9 lbs. **NO. 25-551**

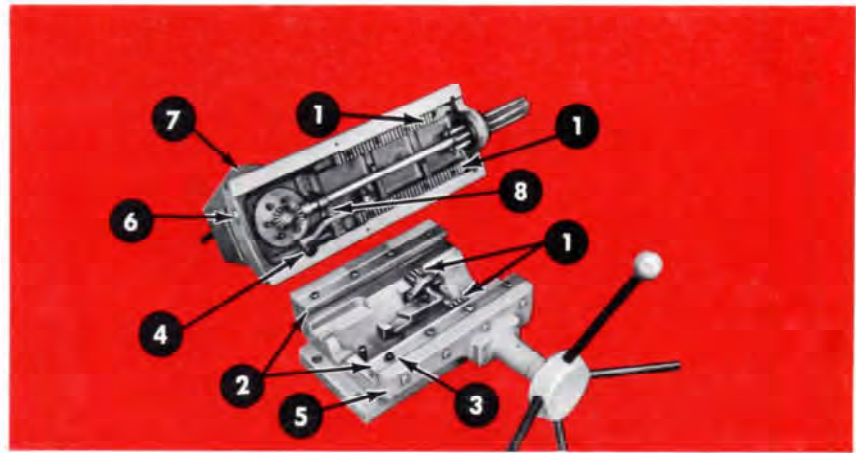
(Note: When used on Double Tool Post Cross Slides, No. 25-552 Adapter is required and must be ordered separately.)

F **ADAPTER:** For mounting No. 25-551 Turret Tool Post on No. 25-555 or No. 25-556 Double Tool Post Cross Slide. Mounts on either front or rear post of cross slide. Complete with base, alignment keys, stud with clamp plate, nut and washer. 2 lbs. **NO. 25-552**

G **GUARD FOR OUTBOARD GEAR TRAIN.** Two-Piece Guard for Outboard Gear Train. Recommended when Lever Type Collet Closer is used on lathes with lead screw. Lower portion swings open to give access to gears, without disturbing collet closer. Complete with hinge, mounting bracket for upper portion, and lathe lubrication chart. 6 lbs. **NO. 25-561**

ENCO SELF- INDEXING BED TURRETS

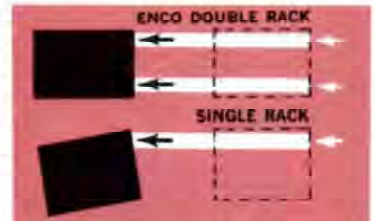
Convert Rockwell-Delta 10", 11"
and 14" Lathes to Hand Turret
Lathes at Low Cost!



When you add an Enco Bed Turret to your lathe, you get turret lathe performance and production at modest cost. You can perform all operations normally done on a turret lathe or hand screw machine including drilling, counterboring, countersinking, spot facing, reaming, turning, etc. Check these *exclusive* features (see illustrations at right) that guarantee equalized feed and precision performance.

- 1 Double rack and gear drive equalizes tool feed pressure, gives smooth, parallel slide travel and minimizes torsional strain as load is equally divided, even under heavy cuts.
- 2 Two-piece adjustable gibs, front and rear, provide lateral adjustment for slide travel.
- 3 Gib lock provided for work on center or for recessing, necking, or grooving operations from turret.
- 4 Indexing precision is assured by hardened and ground tapered seat bushings in the turret head.
- 5 The turret base is constructed to clear the wings of the lathe carriage. This permits the turret to be moved close to the headstock for collet work or to perform facing operations from the compound or cross-slide when necessary.
- 6 Safety stop screw prevents over-ride of head positioning. Also keeps slide from returning too far on back stroke.
- 7 The hexagon head revolves in an aluminum bronze bearing in the slide having a tensile strength of 90,000 p.s.i.
- 8 Lever action spring which locates index pin into index bushings thru trip lever, is so designed that constant pressure is exerted in holding hex head in proper position.

Enco's Bed Turrets are designed and built for heavy duty, high production work. The exclusive double rack and pinion drive provides equalized feed and ensures accuracy, even under heavy feed pressures.



MACHINE DATA

| | Bed Turret No. 25-564* | Bed Turret No. 25-567* | Bed Turret No. 25-566* |
|--|------------------------|------------------------|-------------------------|
| Size of Lathe | 10" | 11" | 14" |
| Shipping weight | 113 lbs. | 120 lbs. | 166 lbs. |
| Tool hole range | $\frac{3}{8}$ " to 1" | $\frac{3}{8}$ " to 1" | 1" to 1 $\frac{1}{2}$ " |
| Turret head across flats | 5 $\frac{3}{8}$ " | 5 $\frac{3}{8}$ " | 7" |
| Turret face dimensions | | | |
| Wide | 3" | 3" | 3 $\frac{3}{8}$ " |
| High | 2 $\frac{1}{2}$ " | 2 $\frac{1}{2}$ " | 3 $\frac{3}{8}$ " |
| Maximum diameter tool clearance over ram | 3 $\frac{3}{8}$ " | 3 $\frac{3}{8}$ " | 5" |
| Total ram travel | 7 $\frac{1}{2}$ " | 7 $\frac{1}{2}$ " | 7 $\frac{1}{2}$ " |
| Ram travel, max. (self indexing) | 6 $\frac{1}{2}$ " | 6 $\frac{1}{2}$ " | 6 $\frac{1}{2}$ " |
| Ram travel, min. (self indexing) | 2" | 2" | 2" |
| Length of ram | 16 $\frac{1}{2}$ " | 16 $\frac{1}{2}$ " | 16 $\frac{1}{2}$ " |
| Base length | 11 $\frac{1}{2}$ " | 11 $\frac{1}{2}$ " | 11 $\frac{1}{2}$ " |

*When a Bed Turret is ordered and shipped with a new lathe, it will be bedded and bored for an additional net charge of \$40.00.

CUT COSTS WITH ROCKWELL-DELTA COOLANT EQUIPMENT

For Single Phase Operation
COOLANT PUMP . . . Complete with $\frac{1}{4}$ HP, 115 V, 60 cy, AC, 1725 rpm motor. 65 lbs. Order 49-618, 49-312 separately. **NO. 49-610**
COOLANT PUMP . . . Complete with $\frac{1}{4}$ HP, 230 V, 60 cy, AC, 1725 rpm motor. 65 lbs. Order 49-618, 49-313 separately. **NO. 49-611**

For 3 Phase Operation
COOLANT PUMP . . . Complete with $\frac{1}{4}$ HP, 208-220/440 V, 50/60 cy, AC, 1425/1725 rpm motor. 65 lbs. Order 49-618, 1320 separately. **NO. 49-614**

Accessories
TANK . . . 16-gal. capacity, 15 $\frac{3}{8}$ x 25 $\frac{3}{8}$ x 11" high, required with any of above pumps. 38 lbs. **NO. 49-618**
ON-AND-OFF TOGGLE SWITCH . . . 2-pole, 1 $\frac{1}{2}$ HP, AC-DC, 125-250 V. Includes 115 V 8-foot cord, 3-prong grounding type plug and clamp. $\frac{3}{4}$ lb. **NO. 49-312**
ON-AND-OFF TOGGLE SWITCH . . . 2-pole, 1 $\frac{1}{2}$ HP, AC-DC, 125-250 V. Includes 230 V 8-foot cord, 3-prong grounding type tandem plug and clamp. $\frac{3}{4}$ lb. **NO. 49-313**

STARTER . . . Manual, 3-phase. Provides overload protection. Specify coolant pump number and voltage. 6 lbs. **NO. 1320**

SPINDLE NOSE SPLASH GUARDS . . . Protect lathe operators from chips and coolant. Do not interfere with lever type collet closers or draw bars. Cannot be used with three or four-jaw chucks.
 For L-00 tapered nose 11" Metal Lathes. 2 lbs. **NO. 25-559**
 For 2 $\frac{1}{4}$ "—8 threaded nose 11" Metal Lathes. 2 lbs. **NO. 25-560**
 For L-00 tapered nose 14" Metal Lathes. 3 lbs. **NO. 25-241**

COOLANT PAN SPLASH GUARDS . . . Especially recommended when coolant is used. With clamps for mounting on lip of coolant pan.
 For 11" Metal Lathes and Hand Screw Machines. 15" high by 30" wide, 12 lbs. **NO. 25-562**
 For 14" Metal Lathes. 24" high by 42" wide, 66 lbs. **NO. 25-243**

COOLANT GROUPS . . . Consist of nozzle, flexible hose, valve mounting bracket (for mounting coolant line and lamp without interference), "L" shaped length of $\frac{1}{2}$ " pipe and compound for sealing between headstock and bed. A "Y" type filter for the drain line and a screen for the drain hole of the coolant pan are provided (coolant piping not furnished).
 For 11" Metal Lathes and Hand Screw Machines. Mounts on either No. 25-555 Double Tool Post Cross Slide or on saddle of carriage. 5 lbs. **NO. 25-558**
 For 14" Metal Lathes. Mounts on saddle of carriage. 5 lbs. **NO. 25-244**

Coolant Flow in Gal. Per Min. with a
1725 R.P.M. Motor at 70° F.
(1425 R.P.M. Motor About 1/5 Less)

| Head in feet | Pipe Dia. | COOLANT | | |
|--------------|-----------------|-----------------------------|----------|--------------------|
| | | Water and Sal-Soda Solution | Lard Oil | SAE 20 Machine Oil |
| | | Flow in Gal. Per Min. | | |
| 0 | $\frac{3}{8}$ " | 20 | 12 | 10 |
| | $\frac{1}{2}$ " | 32 | 20 | 20 |
| | 1" | 14 | 8 | 6 |
| 5 | $\frac{3}{4}$ " | 27 | 15 | 15 |
| | 1" | 7 | — | — |
| 10 | $\frac{3}{4}$ " | 17 | — | — |
| | 1" | — | — | — |

14 ft. Maximum Lift with water. Discharge for water and Sal-Soda solution applies to all solutions of similar viscosity and density. Higher viscosity and density, less flow.

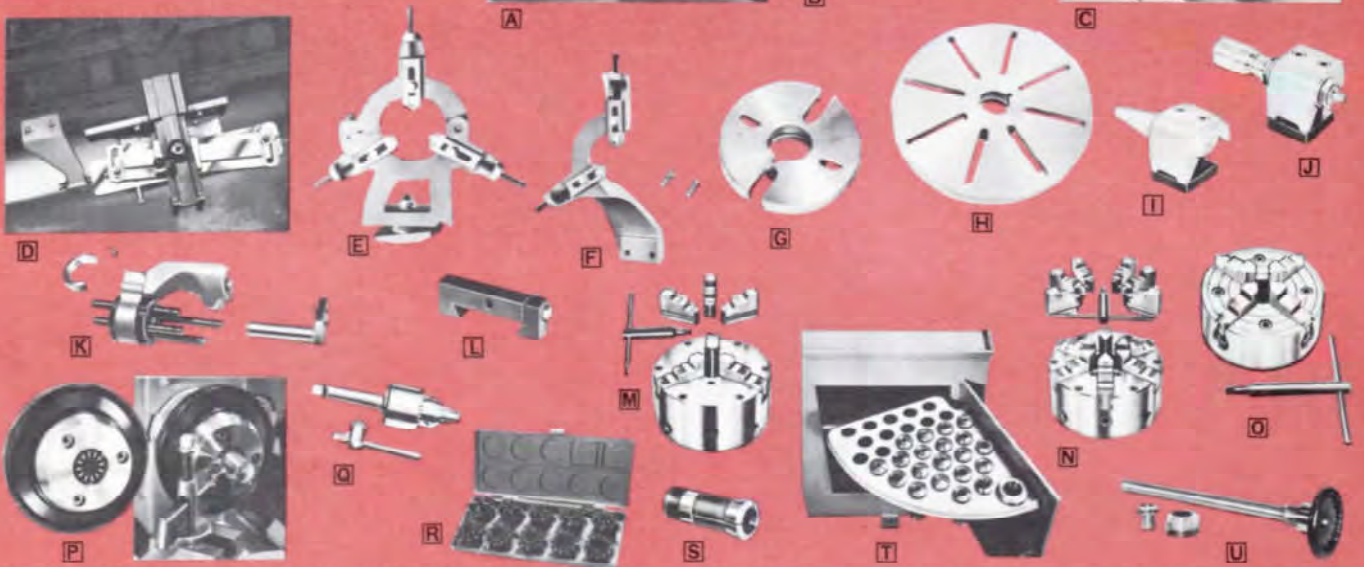


Coolant Pump with Cord, Switch and Tank

ROCKWELL-DELTA
14"
METAL
LATHE
ACCESSORIES



26



THESE ACCESSORIES EXPAND THE PRODUCTIVE

†POWER DRIVEN SPINDLE SPEED CHANGERS . . . Provide operator with the full range of speeds quickly and effortlessly. The single lever control is always convenient to the operator's hand because it travels with the carriage. Almost no physical exertion is required for spindle speed changing and it is a much quicker operation than with the conventional variable speed drive hand wheel. (The No. 25-221 Tachometer is recommended as a companion accessory to these Power Driven Spindle Speed Changers.)

Ⓚ For lathes 41" between centers, 150 lbs. NO. 25-220
 For lathes 30" between centers, 147 lbs. NO. 25-264

Ⓛ **†SAFETY SPINDLE BRAKE WITH ELECTRICAL DISCONNECT AND START SWITCHES . . .** used on magnetically controlled Delta 14" Lathes, it provides:

1. **Quick Electrical Disconnect**—when operator pushes brake lever to left, a limit switch cuts power to the motor.
2. **Quick Manual Breaking of Spindle**—after limit switch cuts off motor power, brake shoe is applied against spindle pulley for quick stopping of spindle.

This modern accessory offers the user these benefits: Speeds production—no waiting for lathe to coast to a stop. Promotes safety—eliminates stopping lathe with hand on chuck. Avoids broken tool bits—lathe always re-starts in same direction. Adds convenience—start button is placed next to brake lever; brake lever automatically returns to running position. Offers fool-proof operation—power is automatically shut off before brake is applied; power cannot be turned on while brake is applied; power stays off until green colored start button is pushed. Maintains flexibility—brake and switches work equally well in forward or reverse rotation. 36 lbs. NO. 25-265

Ⓜ **†TACHOMETER . . .** Complete with drive belt and special headstock cover with integral nacelle. Tachometer is directly belted to spindle pulley for accuracy; 2½" diameter dial is calibrated for direct reading in both direct drive and back gear. 41 lbs. NO. 25-221

Ⓝ **†TAPER ATTACHMENT . . .** Telescoping type. Used for boring and turning tapers up to 9¼" long at one setting with adjustment by means of a micrometer screw up to 3½" per foot on diameter or 18" included angle. Not necessary to disconnect cross feed screw to change from straight to taper turning. Binding lever can be left loose while cutting tapers to permit rapid approach to work by means of cross slide handwheel; or binding lever can be tightened so that cross slide is directly traversed by means of the cross slide pull bar. 140 lbs. NO. 25-222

Ⓞ **STEADY REST . . .** ½" to 4½" capacity. Top half hinged for easy loading. With mounting parts. 24 lbs. NO. 25-223

Ⓟ **FOLLOWER REST . . .** ½" to 4½" capacity. With mounting bolts. 151 lbs. NO. 25-224

Ⓠ **DRIVE PLATE . . .** 9", for L-00 tapered nose. 13 lbs. NO. 25-225

Ⓡ **FACE PLATE . . .** 13½", for L-00 tapered nose, 38 lbs. NO. 25-226

Ⓢ **PLAIN CARRIAGE STOP . . .** Used on either side of carriage to provide a positive longitudinal feed stop for cutting shoulders, etc. Includes parts for mounting to front V-way of bed. 5 lbs. NO. 25-227

Ⓣ **MICROMETER CARRIAGE STOP . . .** Used on either side of carriage to provide a positive longitudinal feed stop for cutting shoulders, for accurate facing, boring, etc. Collar is graduated in .001" and is self-locking by means of a unique spring lock feature. Includes parts for mounting to front V-way of bed. 2 lbs. NO. 25-228

†Mounted without charge only when ordered with new lathe. Includes instructions for field mounting.

Ⓤ **FOUR-POSITION CARRIAGE STOP . . .** Used to provide up to four positive longitudinal feed stops for repetitive operations like spacing shoulders on shafts. Range is 4½" from long to short stop. Threaded fingers can be locked by set screws. Body is knurled for quick indexing and is self-locating. Includes parts for mounting to front V-way of bed, stop finger for carriage, ¼" positioning collar for back gear engagement shaft and instructions for mounting. 11 lbs. NO. 25-240

Ⓡ **THREAD STOP . . .** Makes thread cutting faster, easier; limits the forward travel of cross slide against a positive, adjustable stop. Clamps on dovetail of saddle in front of cross slide. 2 lbs. NO. 25-229

CHUCKS . . . FOR L-00 TAPERED NOSE. COMPLETE WITH FITTED CHUCK PLATE AND WRENCH.

Ⓢ **9", 3-JAW ADJUST-TRU UNIVERSAL TYPE . . .** Has three internal and three external jaws. 62 lbs. NO. 25-230

Ⓣ **9", 6-JAW ADJUST-TRU UNIVERSAL TYPE . . .** Has six internal and six external jaws. 68 lbs. NO. 25-231

Ⓤ **10", 4-JAW INDEPENDENT TYPE . . .** Has one set of jaws reversible for internal or external work. 63 lbs. NO. 25-232

Ⓡ **JACOBS MODEL 50 COLLET CHUCK . . .** Used with Jacobs Series 500 Rubber-Flex Collets. For many user advantages, see Page 20. **CHUCK**, complete with fitted chuck plate for mounting on L-00 taper key drive spindle nose models. hex wrench and instructions. Without collets. 11½ lbs. NO. 25-176

Ⓢ **DRILL CHUCK . . .** 3-jaw key type, 0-½", with chuck key, No. 3 M.T. shank. 3 lbs. NO. 17-820

Ⓡ **JACOBS SERIES 500 RUBBER-FLEX COLLETS . . .** Used with the Jacobs Model 50 Collet Chuck. For big chucking capacities and user benefits, see Page 20.

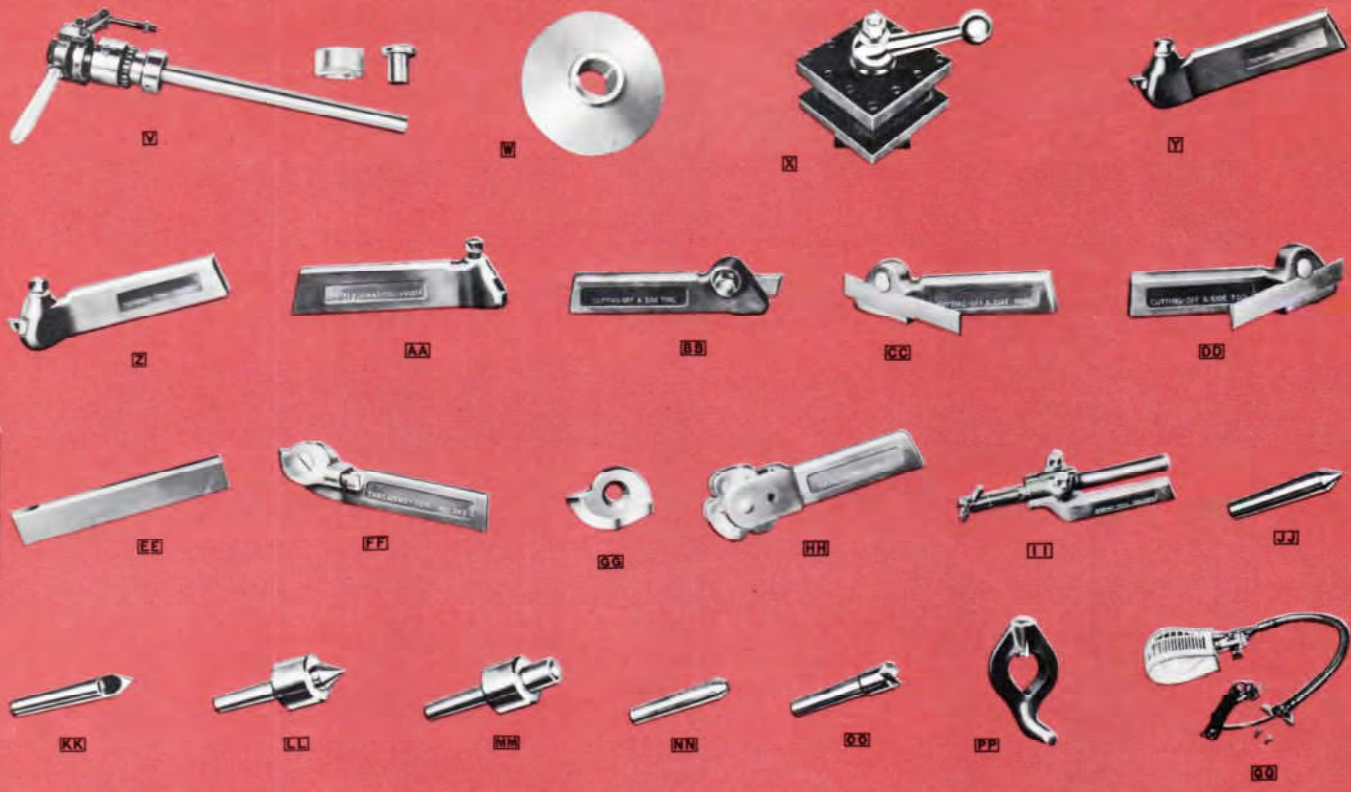
| Quantity | Capacity (Inches) | Capacity (Metric) | Cat. No. |
|-----------|-------------------|-------------------|----------|
| One | .10— .20 | 2.5— 5.1 mm | 25-281 |
| One | .20— .30 | 5.1— 7.6 mm | 25-282 |
| One | .30— .40 | 7.6— 10.2 mm | 25-283 |
| One | .40— .50 | 10.2— 12.7 mm | 25-284 |
| One | .50— .60 | 12.7— 15.2 mm | 25-285 |
| One | .60— .70 | 15.2— 17.8 mm | 25-286 |
| One | .70— .80 | 17.8— 20.3 mm | 25-287 |
| One | .80— .90 | 20.3— 22.9 mm | 25-288 |
| One | .90— 1.00 | 22.9— 25.4 mm | 25-289 |
| One | 1.00— 1.06 | 25.4— 27 mm | 25-290 |
| Set of 10 | .10 to 1.06 | 2.5 to 27 mm | 25-280 |

Ⓡ **STEEL COLLETS . . .** Self-releasing type for holding round stock. Made of selected steel, heat treated and properly hardened.

| Quantity | Capacities | Wt., Lbs. | Cat. No. |
|----------|---|-----------|----------|
| Set of 8 | ½" to ½" by 16ths | 5 | 25-600 |
| Set of 8 | ½" to 1" by 16ths | 5 | 25-610 |
| One | ½" to 1½" by 64ths (Specify No. 25-612 and size desired.) | ¾ | 25-612 |

Ⓡ **RACK FOR COLLETS . . .** Accommodates 32 collets and the collet sleeve. Includes instructions for mounting on inside of tailstock pedestal door. 6 lbs. NO. 25-235

Ⓡ **DRAW BAR . . .** For collets. Has hardened threads for long life. Bail thrust bearing transmits tremendous gripping power to collet, yet the bar is easy to tighten or release. Includes 6" hand wheel collet sleeve and spindle nose cap. 9 lbs. NO. 25-233



CAPACITY OF ROCKWELL-DELTA 14" METAL LATHES

V LEVER TYPE BALL BEARING COLLET CLOSERS . . . Include sleeve for 5-C collets, spindle nose cap and linkage between handle and headstock body. The collet sleeve and back plate are hardened and ground for accuracy and long life. Has lightweight aluminum handle. For lathes with Serial No. 133-4207 and lower. 11 lbs. **NO. 25-234**
 For lathes with Serial No. 133-4208 and higher. 19 lbs. **NO. 25-268**

W ROUGH CHUCK PLATE . . . 10". Machined to fit L-00 tapered nose. This is a high quality, cast iron plate with enough stock left to be fitted to chucks requiring 9" or 10" diameter chuck plate. Without holes for mounting chuck. 32 lbs. **NO. 25-246**

X TURRET TOOL POST FOR COMPOUND . . . For facing, turning, thread cutting, drilling, boring and other operations. Speeds up production by eliminating tool changing. 3 1/2" square head takes four 7/8" or smaller cutter bits and ±0 tool holders. Indexing feature provides 12 positions — 3 for each tool. 30° position can be used for threading. 9 lbs. **NO. 25-236**

METRIC TRANSPOSING GEAR KIT . . . With transposing gear, stud gears and everything needed to convert lathe for cutting standard metric thread pitches. Includes instructions for field mounting. Price and delivery quoted on request. **NO. 25-245**

TOOL HOLDERS . . . Drop forged from special steel, heat treated and hardened. With set screw and wrench.

| Type | Shank Size | Bit or Blade Size | Bit or Blade Furnished | Wt., Lbs. | Cat. No. |
|--|--------------|-------------------|------------------------------|-----------|----------|
| V Straight | 3/8 x 1 3/8" | 3/8 x 3/8" | HSS Bit | 3 | 25-247 |
| Z Right-hand | 3/8 x 1 3/8" | 3/8 x 3/8" | HSS Bit | 3 | 25-248 |
| Left-hand | 3/8 x 1 3/8" | 3/8 x 3/8" | HSS Bit | 3 | 25-249 |
| AA Straight Carbide | 3/8 x 1 1/2" | 3/8 x 3/8" | None | 3 | 25-250 |
| Right-hand Off-set Carbide | 3/8 x 1 1/2" | 3/8 x 3/8" | None | 3 | 25-251 |
| Left-hand Off-set Carbide | 3/8 x 1 1/2" | 3/8 x 3/8" | None | 3 | 25-252 |
| BB Straight Cutting-Off and Side | 3/8 x 1 3/8" | 1/2 x 5/8" | HSS Blade (ground both ends) | 3 | 25-253 |
| CC Right-hand Off-set Cutting-Off And Side | 3/8 x 1 3/8" | 1/2 x 5/8" | HSS Blade (ground both ends) | 3 | 25-254 |
| DD Left-hand Off-Set Cutting-Off and Side | 3/8 x 1 3/8" | 1/2 x 5/8" | HSS Blade (ground both ends) | 3 | 25-255 |

EE CUTTING-OFF BLADE . . . 1/2 x 7/8", made of HSS, ground and ready for use in Tool Holders Nos. 25-253, 25-254 and 25-255. 2 oz. **NO. 25-261**

FF THREADING TOOL
 Tool holder is drop forged from special steel, heat treated and hardened. The HSS cutter is ground to an included angle of 60° and backed off for proper clearance. Cutter is sharpened by grinding top edge only; therefore, true form and correct angle are maintained. A hardened stop screw provides for positive, easy adjustment of cutter after sharpening.
 3/8 x 1 3/8", includes HSS 60° formed cutter. 2 lbs. **NO. 25-256**

GG FORMED THREADING CUTTER . . . sharp 60° V-thread, fits No. 25-256 threading tool. 4 oz. **NO. 25-257**

KNURLING TOOLS
 Knurls and pins are carefully made from high grade tool steel, hardened and tempered. Teeth of knurls are accurately cut concentric to hole to assure quality knurling of work piece. Holders are hardened.

SELF-CENTERING HEAD . . . 3/8 x 1 3/8", with one pair of 1/4 x 3/4" medium diamond knurls. 3 lbs. **NO. 25-258**

HH REVOLVING HEAD . . . 3/8 x 1 3/8", with three pairs of fine, medium and coarse 1/4 x 3/4" diamond knurls. 3 lbs. **NO. 25-259**

II BORING TOOL
 Unique design of holder takes bars of various diameters without sleeves or bushings. The sleeve-bar clamping feature is exceptionally strong and provides for rapid adjustment of either straight or angular cutters without need for extra parts.
 3/8 x 1 3/8", for bars 3/8 to 1 1/8" in diameter, includes one 45° and one 90° cutter, two wrenches and one 1 1/8" diameter sleeve-bar. 8 lbs. **NO. 25-260**

CENTERS . . . High quality type. With No. 3 M.T. shank.

| Type | Recommended Use and Description | Wt., Lbs. | Cat. No. |
|---------------|---|-----------|----------|
| 60° Lathe | For headstock. Soft and ground. | 1 | 25-238 |
| JJ 60° Lathe | For tailstock. Hardened and ground. | 1 | 25-541 |
| KK 60° Half | For tailstock. Hardened and ground. | 1 | 25-543 |
| LL 60° Live | Pointed, for tailstock, with heavy-duty bearing. | 1 | 25-544 |
| MM 60° Live | Hollow, for tailstock, with heavy-duty bearing. | 1 | 25-545 |
| NN 60° Lathe | Hollow, hardened and ground. | 1 | 25-546 |
| OO 90° Crotch | Used in tailstock for drilling. 1 1/8" dia. head has 1/16" relief hole. | 2 | 25-548 |

PP SAFETY TYPE LATHE DOGS . . . Bent-tail type. Made of forged, selected steel with hubs large enough to permit re-tapping. Include hexagon socket safety screw and wrench.

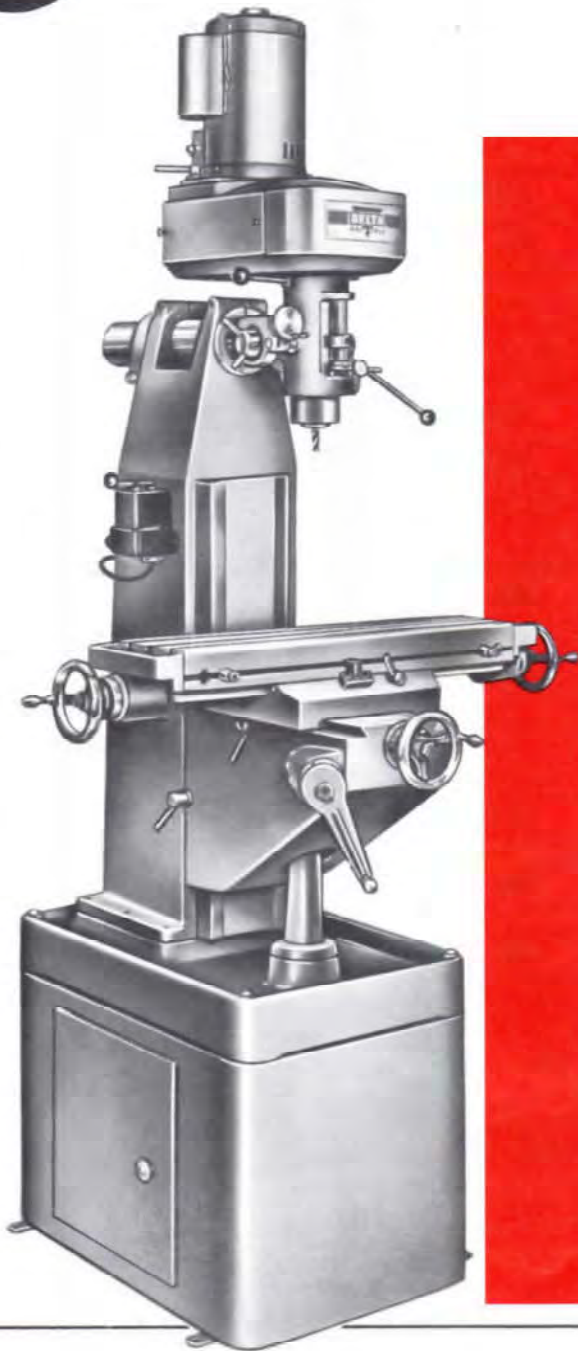
| Capacity, In. | Wt., Lbs. | Cat. No. |
|---------------|-----------|----------|
| 3/8 | 1/2 | 25-661 |
| 1/2 | 1/2 | 25-662 |
| 3/4 | 1 | 25-663 |
| 1 | 1 1/4 | 25-664 |
| 1 1/4 | 2 | 25-665 |
| 1 1/2 | 2 1/4 | 25-666 |
| 1 3/4 | 3 1/2 | 25-262 |
| 2 | 4 | 25-263 |

TAILSTOCK RAM WITH TANG SLOT . . . Same as standard tailstock ram, except with a tang slot for positive drive of twist drills or other tools having a tang-type No. 3 M.T. shank. 00 lbs. **NO. 25-276**

QQ LAMP ATTACHMENT . . . With 15" flexible gooseneck. Includes nylon shield, mounting bracket, switch and 8-foot cord with 2-prong plug. Uses std. bulb (not included) up to 100 watts. 2 lbs. **NO. 25-857**



28



VERTICAL MILLING MACHINE

***will capably
meet your needs
on every job!
Here's why...***

GREATER ACCURACY—All operating parts are manufactured to very close tolerances, then *quality control* tested to assure the highest machine tool standards of accuracy.

DESIGNED FOR DURABILITY—One-piece head and ram . . . five ball bearing supported spindle in 3" diameter quill . . . large $\frac{3}{4}$ " ways typify the heavy duty construction that guarantees long life and trouble-free performance.

ADDED CONVENIENCE—Every operating lever, crank and control is conveniently positioned for operational ease and to speed up production.

PROVEN RELIABILITY—More than 35 years' experience in designing and building the finest metal-working machines for industry everywhere stands behind the Rockwell-Delta Milling Machine. It's your guarantee that, when you buy a DELTA, you have bought the best!

STANDARD EQUIPMENT

Basic Milling Machine includes storage type cabinet base with door, combination spindle brake and lock, draw bolt for collets, V-belt and motor pulley with $\frac{5}{8}$ " or $\frac{3}{4}$ " bore.



MILL/SELECTION GUIDE

vertical milling machine

(Less Electricals)

Basic Machine with cabinet base, V-belt and motor pulley, 5/8" bore. 750 lbs.
NO. 21-100

motors and controls MOUNTED AND WIRED
(See Pages 32 and 33 for separate Motors and Controls)

| MOTOR | MOTOR CONTROL | MOTOR ENCLOSURE | CYCLES & MOTOR RPM | VOLTAGE | SHIPPING WEIGHT (LBS.) | CATALOG NUMBER |
|--|----------------------------------|--------------------|--------------------|-------------|------------------------|----------------|
| Single Phase, One-Half Horsepower | Drum Switch Only | Guarded Drip Proof | 60-1725 | 115/230 | 27 | 49-472 |
| | | Guarded Drip Proof | 60-1140 | 115/230 | 39 3/4 | 49-473 |
| | Drum Switch and Overload Switch | Guarded Drip Proof | 60-1725 | 115/230 | 29 3/4 | 49-488 |
| | | Guarded Drip Proof | 60-1140 | 115/230 | 42 3/4 | 49-489 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 60-1725 | 115/230 | 32 3/4 | 49-474 |
| | | Guarded Drip Proof | 60-1140 | 115/230 | 45 3/4 | 49-475 |
| Single Phase, Three-Quarter Horsepower | Drum Switch Only | Guarded Drip Proof | 60-1725 | 115/230 | 36 3/4 | 49-476 |
| | Drum Switch and Overload Switch | Guarded Drip Proof | 60-1725 | 115/230 | 39 3/4 | 49-490 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 60-1725 | 115/230 | 42 3/4 | 49-477 |
| Three Phase, One-Half Horsepower | Drum Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 25 3/4 | 49-478 |
| | | Guarded Drip Proof | 50/60-960/1140 | 208-220/440 | 26 1/4 | 49-479 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 28 1/4 | 49-480 |
| | | Guarded Drip Proof | 50/60-960/1140 | 208-220/440 | 28 3/4 | 49-481 |
| Three Phase, Three-Quarter Horsepower | Drum Switch and Overload Switch | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 43 1/4 | 49-482 |
| | Drum Switch and Magnetic Starter | Guarded Drip Proof | 50/60-1425/1725 | 208-220/440 | 45 3/4 | 49-483 |

NOTE: Unless otherwise specified, single phase milling machines will be wired for 115V and three phase milling machines for 208-220V. Power Cord and Plug supplied for single phase milling machines only.

machine data

TABLE

Working Surface..... 6 1/2 x 24"

No. of T-Slots..... on Front-1; on Top-3

Size of T-Slots..... on Front-3/8"; on Top-7/16"

Spacing of T-Slots (Center to Center)..... 2"

Height from Floor (Lowest Position)..... 35"

RANGE

Table Longitudinal Travel..... 16"

Table Cross Travel..... 6 3/4"

Table Vertical Travel..... 16 1/2"

Spindle Nose to Table..... 0 to 16 1/2"

Spindle ϕ to Column V-ways..... 2 5/8" to 11 1/4"

SPINDLE

Spindle Taper..... R8

Hole Through Spindle..... 7/16"

Number of Bearings..... 5

Number of Splines..... 6

SPEEDS

With 1725 RPM Motor .370, 700, 1170, 2440, 4420 and 6300 rpm

With 1140 RPM Motor .245, 470, 780, 1620, 2940 and 4200 rpm

QUILL

Diameter..... 3"

Stroke..... 2 1/2"

Feed..... Choice of Rapid or Fine Feed

MOTORS

NEMA C Face Frame (Special)..... 56

Horsepower Recommended..... 1/2 or 3/4

Speeds Recommended (RPM)..... 1725 or 1140

Special Shaft Length (from Face of Flange)..... 4 1/2"

OVERALL DIMENSIONS

Height (Including 1/2 HP Motor)..... 73 1/2"

Width..... 37 3/4"; Front to Rear..... 33 3/4"

CABINET BASE DIMENSIONS

Width..... 17 1/2"

Front to Rear..... 26 1/2"

LUGS (FOUR) FOR LAGGING TO FLOOR

Centers, Left to Right..... 18 3/4"

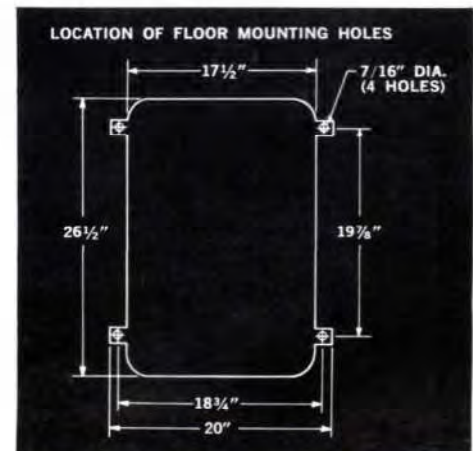
Centers, Front to Rear..... 19 7/8"

Size of Hole in Lugs..... 3/4"

SHIPPING WEIGHT WITH ELECTRICALS

(Approx.)..... 780 lbs.

floor space requirements



Advanced Features

that make the new
**Rockwell-Delta
Vertical Milling Machine**
Accurate... Convenient
... Durable

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UNIQUE WORM AND GEAR TILTING MECHANISM

Tramming the table for perfect 90° positioning of the spindle can be accomplished easily with the worm and gear tilting mechanism. Fine adjustment for tilting the spindle to any angle is easily achieved without danger of the head falling. Motor and belt guard can be swiveled around a circle, eliminating interference when the spindle is tilted beyond a horizontal position.

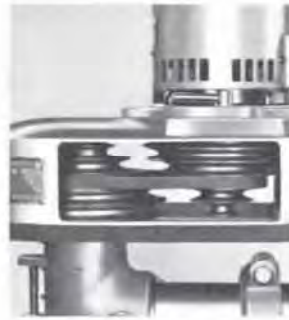


CONVENIENT CONTROLS

All controls are located "up front," readily accessible to the operator. The optional lever type rapid feed or the wheel type fine feed adds convenience plus the extra accuracy needed for operations like boring to a specified depth. Heavy stop allows repeated machining to same depth. Lever at upper left actuates combination spindle lock and brake.

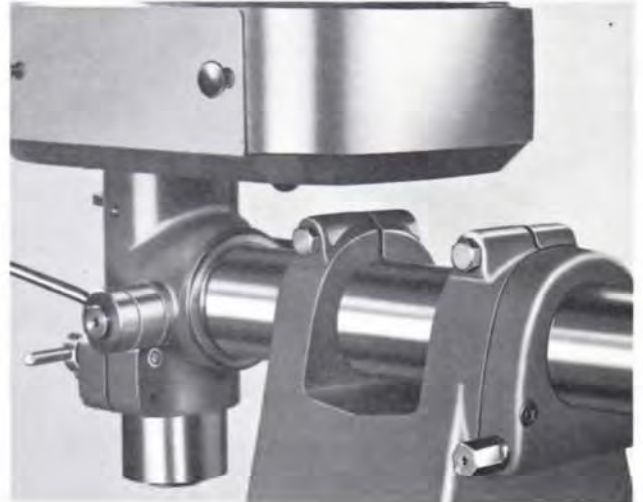
LARGE SPINDLE AND MASSIVE QUILL

The heavy, six-spline spindle is supported on five ball bearings in a large 3" diameter quill. Quill is **hard chrome plated**, guaranteeing long machine life with consistent, new machine accuracy. Spindle takes R8 collets with up to 3/4" capacity.



CLOSE-COUPLED DRIVE

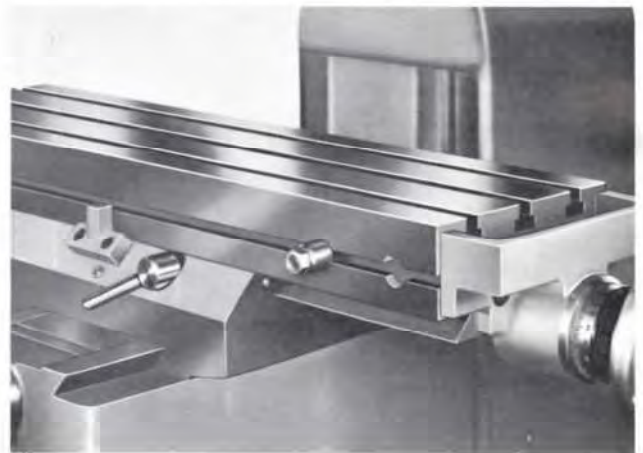
Smooth operation with full power at the spindle results from the close belt centers. Dynamically balanced pulleys are made from cast iron for long life. The extra weight of cast iron provides a fly-wheel type action for very smooth cutting. Motor swivels to release tension on the belt for easy speed changing. Handy speed chart shows correct belt settings.



HEAD AND RAM CAST IN ONE PIECE, QUILL PRECISION FIT INTO HEAD

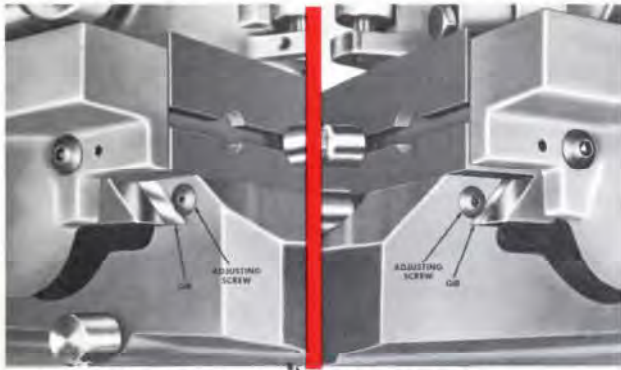
Notice the widely spaced clamps which rigidly hold the heavy 3 1/8" diameter ram. The ram, with its 1 3/16" wall, is integrally cast with the head, virtually eliminating all deflection of the head.

Quill slides snugly in precision bored lands inside head. Head design permits adjustment to compensate for quill wear after long use. New machine accuracy is maintained without need for replacing head and quill.



BIG TABLE, MASSIVE SADDLE, EASY-TO-READ MICROMETER COLLARS

Large 2 1/4" x 6 1/2" x 24" table has 156 square inches of working surface. Table travels on large, precision ground, 3/4" dove-tail ways, supported by a massive saddle. Handy table end trays gather chips, provide convenient storage for tools and collect coolant. The single handle lock feature and the ease of adjusting the rugged stops add convenience in operation. Micrometer collars have deep cut .001" calibrations; screw feeds table .200" for each rotation of hand wheel.



LARGE, PRECISION GROUND 3/4" DOVE-TAIL WAY CONSTRUCTION THROUGHOUT

Table, saddle and knee slide on precision ground 3/4" ways with accurately fitted, tapered gibs. Photos of tapered gib for table clearly shows the dual adjustment feature using two adjusting screws, one at each end of the gib. Accurate adjustment of all gibs is possible, with absolutely no end play as found with the conventional adjustment feature using a single screw working in a slot-type, tapered gib.

MASSIVE BOX TYPE KNEE
Enclosed, box type knee, with its internal ribbing and cross bracing, provides a solid support for the saddle and table. Knee has full length engagement with the column dove-tail slide throughout its entire vertical travel. The heavy ball bearing elevating screw operates easily, even when supporting heavy work pieces. Seven ball bearings in all support the elevating screw, the elevating crank shaft and the two table feed screws.



ROCKWELL-DELTA
VERTICAL
MILLING
MACHINE

ACCESSORIES

A

B

C

D

E

F

G

H

DO MORE JOBS WITH THESE
ROCKWELL-DELTA MILLING MACHINE ACCESSORIES

- A HEAD FOR MILLING MACHINE**, complete. Includes head with ram, spindle and quill, spindle brake and lock, feed parts, belt guard, pulleys, V-belt, motor mounting plate and draw-bolt for collets. Less electricals. 128 lbs. **NO. 21-815**
- B GUARDS** (two) for side openings of belt guard. 2 lbs. **NO. 21-813**
- C MACHINE VISE**, "Low Boy" design, 4" maximum opening. Includes 360° swivel base, 1 1/4" x 4 1/2" steel jaws, crank type wrench and two removable 7/16" keys for table slot. 23 lbs. **NO. 21-811**
- D UNIVISE**, with 1 1/2" jaw opening. Holds work piece at any angle by means of four rotating joints. Includes two removable 7/16" keys for table slot. 16 lbs. **NO. 24-902**
- COLLETS**, set of six, from 1/8" to 7/16" by 16ths, style R8. 9 lbs. **NO. 21-800**
- COLLETS**, set of five, from 1/2" to 3/4" by 16ths, style R8. 7 lbs. **NO. 21-810**
- E COLLET**, one only, available from 1/8" to 3/4" by 16ths, style R8. (Specify No. 21-812 and size desired.) 2 lbs. **NO. 21-812**
- 3/16" END MILL HOLDER**, style R8. 2 lbs. **NO. 21-803**

- 3/8" END MILL HOLDER**, style R8. 2 1/4 lbs. **NO. 21-804**
 - 1/2" END MILL HOLDER**, style R8. 2 1/2 lbs. **NO. 21-805**
 - F 5/8" END MILL HOLDER**, style R8. 2 3/4 lbs. **NO. 21-806**
 - *3/4" END MILL HOLDER**, style R8. 3 lbs. **NO. 21-807**
 - *5/8" END MILL HOLDER**, style R8. 3 1/4 lbs. **NO. 21-808**
 - *1" END MILL HOLDER**, style R8. 3 1/2 lbs. **NO. 21-809**
 - ARBOR**, for drill chucks with No. 3 Jacobs female taper, style R8. 3 lbs. **NO. 21-801**
 - G ARBOR**, for drill chucks with No. 33 Jacobs female taper, style R8. 3 lbs. **NO. 21-802**
 - H LAMP ATTACHMENT** with 15" flexible gooseneck. Includes nylon shield, mounting bracket, switch and 8-foot cord with 2-prong 115V plug. Uses standard bulb (not included) up to 100 watts. 2 lbs. **NO. 25-857**
- *NOTE:** For single end mills only.

ROCKWELL-DELTA



designed specifically for
32 Rockwell-Delta lathes and milling machines
provide maximum efficiency in operation

MOTORS

Here's Why Rockwell-Delta Motors Give Long Life and Dependable, Trouble-Free Service

- All ball bearings are sealed and lubricated for life. Bearing designs permit Rockwell-Delta Motors to be mounted either vertically or horizontally.
- Motor enclosures are designed to offer the maximum safety possible under all operating conditions.
- All Rockwell-Delta Motors comply with or exceed the maximum motor manufacturing power standards (breakdown torque) as established by the National Electrical Manufacturers Association (NEMA).
- All double-shaft motors are supplied with one shaft guard for maximum safety to the operator.
- Motor windings have high grade insulation and are carefully wound and tested.
- Accurately balanced rotors insure smoothness of operation and prevent destructive vibration.
- Well designed ventilating systems assure cool operating motors, thus providing adequate overload capacity and longer motor life.

SPECIFICATIONS FOR ROCKWELL-DELTA SINGLE-PHASE CAPACITOR START MOTORS

(115V cord and plug set supplied with motor is grounding type with 3-prong plug.)

| Number | H.P. | R.P.M. | Volts | Cycles | Shaft | Frame Size | Switch | Cord & Plug | Temp. Rise | Enclosure | Usage | Wt. |
|---------|------|--------|---------|--------|-------------|--------------|--------|-------------|------------|--------------------|-----------------|-----|
| 62-510 | 1/2 | 1725 | 115/230 | 60 | 3/8" Single | NEMA 56C Spl | None | No | 40°C | Guarded Drip-proof | Milling Machine | 28 |
| 62-530 | 1/2 | 1140 | 115/230 | 60 | 3/8" Single | NEMA 56C Spl | None | No | 70°C | Guarded Drip-proof | Milling Machine | 45 |
| 62-550 | 3/4 | 1725 | 115/230 | 60 | 3/8" Single | NEMA 56C Spl | None | No | 40°C | Guarded Drip-proof | Milling Machine | 38 |
| 62-710 | 3/4 | 1725 | 115/230 | 60 | 3/8" Single | No. 6 | None | Yes | 40°C | Guarded Drip-proof | 10" Metal Lathe | 45 |
| 62-770 | 3/4 | 1725 | 115/230 | 60 | 3/8" Single | No. 6 | None | Yes | 55°C | TEFC | 10" Metal Lathe | 45 |
| 83-210 | 1 | 1725 | 115/230 | 60 | 3/4" Single | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 55 |
| *83-212 | 1 | 1140 | 115/230 | 60 | 3/4" Single | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 55 |
| *83-220 | 1 | 1425 | 115/230 | 50 | 3/4" Single | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 55 |
| *83-249 | 1 | 1725 | 208 | 60 | 3/4" Single | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 55 |
| 93-610 | 2 | 1725 | 115/230 | 60 | 3/4" Single | No. 8 1/2 | None | No | 60°C | Guarded Drip-proof | 14" Metal Lathe | 79 |

SPECIFICATIONS FOR ROCKWELL-DELTA 3-PHASE MOTORS

| | | | | | | | | | | | | |
|--------|-------|-----------|-------------|-------|---------------|--------------|------|----|------|--------------------|-----------------|-----|
| 66-510 | 1/2 | 1425/1725 | 208-220/440 | 50/60 | 3/8" Single | NEMA 56C Spl | None | No | 40°C | Guarded Drip-proof | Milling Machine | 25 |
| 66-530 | 1/2 | 960/1140 | 208-220/440 | 50/60 | 3/8" Single | NEMA 56C Spl | None | No | 60°C | Guarded Drip-proof | Milling Machine | 32 |
| 66-550 | 3/4 | 1425/1725 | 208-220/440 | 50/60 | 3/8" Single | NEMA 56C Spl | None | No | 40°C | Guarded Drip-proof | Milling Machine | 32 |
| 66-710 | 3/4 | 1425/1725 | 208-220/440 | 50/60 | 3/8" Single | No. 6 | None | No | 40°C | Guarded Drip-proof | 10" Metal Lathe | 35 |
| 66-770 | 3/4 | 1425/1725 | 208-220/440 | 50/60 | 3/8" Single | No. 6 | None | No | 55°C | TENV | 10" Metal Lathe | 45 |
| 86-920 | 1 | 1425/1725 | 208-220/440 | 50/60 | 3/4" Double | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 56 |
| 86-922 | 1 | 1140 | 208-220/440 | 60 | 3/4" Double | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 55 |
| 86-970 | 1 | 1425/1725 | 208-220/440 | 50/60 | 3/4" Double | No. 8 1/2 | None | No | 55°C | TENV | 11" Metal Lathe | 45 |
| 87-120 | 1 1/2 | 1425/1725 | 208-220/440 | 50/60 | 3/4" Double | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 80 |
| 87-122 | 1 1/2 | 960/1140 | 208-220/440 | 50/60 | 3/4" Double | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 11" Metal Lathe | 58 |
| 87-170 | 1 1/2 | 1425/1725 | 208-220/440 | 50/60 | 3/4" Double | No. 8 1/2 | None | No | 55°C | TENV | 11" Metal Lathe | 53 |
| 96-320 | 2 | 1425/1725 | 208-220/440 | 50/60 | 3/4" Single | No. 8 1/2 | None | No | 40°C | Guarded Drip-proof | 14" Metal Lathe | 60 |
| 96-342 | 2 | 1425/1725 | 208-220/440 | 50/60 | 7/8" Single | NEMA 184 | None | No | 55°C | TEFC | 14" Metal Lathe | 70 |
| 96-350 | 2/1 | 1725/850 | 208-220 | 60 | 1 1/8" Single | NEMA 213 | None | No | 40°C | Guarded Drip-proof | 14" Metal Lathe | 100 |
| 96-351 | 2/1 | 1725/850 | 440 | 60 | 1 1/8" Single | NEMA 213 | None | No | 40°C | Guarded Drip-proof | 14" Metal Lathe | 100 |
| 96-620 | 3 | 1425/1725 | 208-220/440 | 50/60 | 1 1/8" Single | NEMA 213 | None | No | 40°C | Guarded Drip-proof | 14" Metal Lathe | 101 |
| 96-640 | 3 | 1425/1725 | 208-220/440 | 50/60 | 1 1/8" Single | NEMA 213 | None | No | 55°C | TEFC | 14" Metal Lathe | 120 |

Write for information on available motors not listed. Such motors, when ordered special, are not subject to cancellation.

*Not warehoused, available on special order only.
 TENV—totally enclosed, non-ventilated.
 TEFC—totally enclosed, fan cooled.

DIMENSIONAL DATA

ON ROCKWELL-DELTA MOTORS

*All motors listed are supplied with external junction boxes.

**Supplied with 3/4 x 3/4 x 1 1/4" key.

†Supplied with 3/4 x 3/4 x 1 3/8" key.

‡Supplied with 1/4 x 1/4 x 2" key.



| Motor Frame | A Max | AA* | B Max | BA | D | E | F | H | N-W | P | U | XC |
|-----------------|--------|-----|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|
| Delta No. 6 | 6 1/4 | 1/2 | 4 1/4 | 2 | 3 1/4 | 2 1/2 | 1 1/4 | 3/8 | 1 3/8 | 6 | 3/4** | 1 1/2 |
| Delta No. 8 1/2 | 8 3/4 | 1/2 | 5 | 3 1/2 | 4 1/2 | 3 3/4 | 1 3/8 | 3/8 | 2 1/4 | 8 1/2 | 3/4† | 3/4 |
| NEMA 56 C Spl. | — | 1/2 | — | — | — | — | — | — | 3 3/8 | 6 1/2 | 3/4** | — |
| NEMA 184 | 9 | 3/4 | 7 1/2 | 2 3/4 | 4 1/2 | 3 3/4 | 2 3/4 | 1 1/2 | 2 1/4 | 8 1/2 | 3/4† | — |
| NEMA 213 | 10 1/2 | 3/4 | 7 1/2 | 3 1/2 | 5 1/4 | 4 1/4 | 2 3/4 | 1 1/2 | 3 | 10 3/8 | 1 1/4‡ | — |


NO. 25-505

NO. 25-506

NO. 25-806

NO. 49-365

NO. 49-392

NO. 49-420

NO. 49-424
Manual—Single and 3-Phase—Single Speed

| Cat. No. | Product Usage | Description | Max. HP Rating | | | | Wt., Lbs. |
|----------|---------------|--|----------------|------|-------------|------|-----------|
| | | | Single Phase | | Three Phase | | |
| | | | 115V | 230V | 208-220V | 440V | |
| 25-505 | 11" ML | Manual Reversing Push Button Kit, including mounting and wiring parts. | 1 | 1 | 2 | 2 | 10 |
| 25-506 | 11" ML | Manual Reversing Drum Kit, including mounting and wiring parts. | 1 | 1½ | 2 | 2 | 11 |
| 25-806 | Mill | Manual Reversing Drum Kit, including mounting and wiring parts. | 1 | 1 | 1 | 1 | 3 |
| 49-412 | 10" ML | Manual Reversing Drum Kit, including mounting and wiring parts. | 1 | 1 | 1 | 1 | 1½ |
| 49-420 | 10" & 14" ML | Manual Reversing Drum Kit, including mounting and wiring parts. | 1 | 2 | 2 | 3 | 5 |
| 49-432 | 14" ML | Manual Reversing Drum Kit, including mounting and wiring parts. | 1 | 2 | 3 | 3 | 5 |

Manual—3 Phase—Two Speed

| | | | | | | | |
|--------|--------|---|---|---|---|---|----|
| 49-427 | 14" ML | Manual Reversing Drum Kit, including mounting and wiring parts. | — | — | 3 | 3 | 7 |
| 49-428 | 14" ML | Manual Reversing Drum Kit with two overload switches. | — | — | 3 | 3 | 11 |

Magnetic—Single and 3-Phase—Single Speed

| | | | | | | | |
|--------|--------|--|---|----|---|---|----|
| 49-392 | Mill | Magnetic Reversing Drum. | 1 | 1½ | 2 | 2 | 2 |
| 49-413 | 11" ML | Magnetic Reversing Push Button Kit, including mounting and wiring parts. | — | — | — | — | 1 |
| 49-424 | 14" ML | Magnetic Reversing Push Button Kit, including mounting parts, and reversing starter with 110V transformer. | — | — | — | — | 53 |

Magnetic—3 Phase—Two Speed

| | | | | | | | |
|--------|--------|---|---|---|---|---|----|
| 49-429 | 14" ML | Magnetic Reversing Drum Kit, including mounting parts, and magnetic starter. | — | — | 3 | 3 | 23 |
| 49-430 | 14" ML | Magnetic Reversing Drum Kit with two reversing starters and 110V transformer. | — | — | — | — | 60 |

***Magnetic Starters—Single Phase**

| | | | | | | | |
|--------|--------------------|---|---|---|---|---|---|
| 49-419 | 11" ML | Magnetic Reversing Starter, size O, NEMA type 1, with 230V 60 cycle operating coil and reset button only. | 1 | 2 | — | — | 9 |
| 49-507 | 10" & 14" ML, Mill | Magnetic Starter, size O, NEMA type 1, with 115/230V 60 cycle operating coil and reset button only. | 1 | 2 | — | — | 5 |
| 49-512 | 11" ML | Magnetic Reversing Starter, size O, NEMA type 1, with 115V 60 cycle operating coil and reset button only. | 1 | 2 | — | — | 3 |

***Magnetic Starters—Three Phase**

| | | | | | | | |
|--------|--------------|--|---|---|----|---|----|
| 49-396 | 14" ML | Magnetic Starter, size O, NEMA type 1, with 208-220V 60 cycle operating coil and reset buttons only. | 1 | 2 | 3 | 5 | 6 |
| 49-397 | 14" ML | Magnetic Starter, size O, NEMA type 1, with 440V 60 cycle operating coil and reset buttons only. | 1 | 2 | 3 | 5 | 6 |
| 49-414 | 11" ML | Magnetic Reversing Starter, size OO, NEMA type 1, with 208-220V 60 cycle operating coil and reset button only. | ½ | 1 | 1½ | 2 | 9 |
| 49-416 | 14" ML | Magnetic Reversing Starter, size O, NEMA type 1, with 208-440V to 110V control transformer and reset buttons only. | 1 | 2 | 3 | 5 | 25 |
| 49-418 | 10" ML, Mill | Magnetic Starter, size OO, NEMA type 1, with 208-220V operating coil and reset buttons only. | ½ | 1 | 1½ | 2 | 9 |
| 49-509 | 10" ML, Mill | Magnetic Starter, size OO, NEMA type 1, with 440V operating coil and reset buttons only. | ½ | 1 | 1½ | 2 | 6 |
| 49-511 | 11" ML | Magnetic Reversing Starter, size OO, NEMA type 1, with 440V 60 cycle operating coil and reset button only. | ½ | 1 | 1½ | 2 | 12 |

†Overload Switch

| | | | | | | | |
|--------|------------------------|--------------------------|----|---|---|---|---|
| 49-365 | 10", 11", 14" ML, Mill | Overload Switch, 2-pole. | 1½ | 3 | 5 | 5 | 3 |
|--------|------------------------|--------------------------|----|---|---|---|---|

Power Cord and Plug Sets

| | | | | | | | |
|--------|--------|---|---|---|---|---|---|
| 49-357 | Mill | Cord Set, 8-foot long, #16—3-conductor, type S-J, with 3-prong 115V grounding plug. | ¾ | — | — | — | 2 |
| 49-417 | Mill | Cord Set, 8-foot long, #16—3-conductor, type S-J, 3-prong 230V grounding plug. | — | ¾ | — | — | 2 |
| 49-513 | 11" ML | Cord Set, 8-foot long, #14—3-conductor, type S, 3-prong 115V grounding plug. | 1 | — | — | — | 3 |
| 49-514 | 11" ML | Cord Set, 8-foot long, #14—3-conductor, type S, 3-prong 230V grounding plug. | — | 1 | — | — | 3 |

*Starter provides motor with overload, low-voltage and no-voltage protection. Specify motor number and line voltage when ordering.

†Specify motor number and operating voltage when ordering.

LATHE ACCESSORIES THAT INCREASE SAFETY AND SPEED PRODUCTION

34



NO. 25-265



NO. 25-814



NO. 25-831

SAFETY SPINDLE BRAKE AND ELECTRICAL DISCONNECT SWITCH KIT for 14" Metal Lathe. This kit makes the lathe safer and speeds production work. When the brake lever is pushed, the power is cut off and the spindle stops. A separate button starts the lathe again *in the same direction*. Recommended for use with Magnetic Control Kits Nos. 49-424, 49-429 and 49-430. Includes braking mechanism, disconnect and start switches, mounting parts and wiring diagrams for field mounting. Mounted and wired without charge when ordered with a new lathe. 36 lbs. **NO. 25-265**

MAGNETIC STARTER SAFETY ELECTRICAL DISCONNECT SWITCH KIT for 11" Metal Lathe. This kit, when used with a three-phase magnetic starter, automatically shuts off motor when gear train guard is swung open. Motor remains off even when cover is closed until start button is depressed. Includes disconnect switch, wiring, mounting parts, wiring diagram and everything needed for connecting between switch and motor. Designed for field mounting. 4 lbs. **NO. 25-513**

MAGNETIC STARTER SAFETY ELECTRICAL DISCONNECT SWITCH KIT for 11" Metal Lathe. Same as 25-513 but price includes charge for mounting and wiring at factory when ordered as original equipment on new lathes. 4 lbs. **NO. 25-514**

MAGNETIC STARTER SAFETY ELECTRICAL DISCONNECT SWITCH KIT for 10" Metal Lathe. This kit, when used with a three phase magnetic starter, automatically shuts off the motor when headstock cover is swung open. Motor remains off, even when cover is closed, until start button is depressed. Includes switch, mounting parts and wiring diagrams for field mounting. 1 lb. **NO. 25-813**

MAGNETIC STARTER ELECTRICAL DISCONNECT SWITCH KIT for 10" Metal Lathe. Same as No. 25-813 but price includes charge for mounting at factory when ordered as original equipment on new lathes, 1 lb. **NO. 25-814**

MECHANICAL BACK GEAR LOCK-OUT KIT. This kit protects the gears of the headstock because it forces the operator to raise the headstock cover before the back gears can be engaged. Shipped complete with instructions for field mounting, or will be mounted at the factory without charge if so specified on the order. *When ordered with a new lathe only.* (The No. 25-813 or 25-814 Kit should be used with Lock-out for protection of operator.) 2 lbs. **NO. 25-831**

motor pulleys

| Product Usage | Outside Diameter | Bore | Wt. Lbs. | Cat. No. |
|--------------------|------------------|--------|----------|----------|
| 10" ML, Bench Mdl. | 2" | 1/2" | 1 3/4 | 41-902 |
| 10" ML, Bench Mdl. | 2" | 5/8" | 1 3/4 | 41-903 |
| 10" ML, Bench Mdl. | 2" | 3/4" | 1 3/4 | 41-904 |
| 10" ML, Bench Mdl. | 2" | 3/4" | 1 3/4 | 41-905 |
| 10" ML, Cab. Mdl. | 2" | 1/2" | 1 | 41-212 |
| 10" ML, Cab. Mdl. | 2" | 5/8" | 1 | 41-213 |
| 10" ML, Cab. Mdl. | 2" | 3/4" | 1 | 41-214 |
| 10" ML, Cab. Mdl. | 2" | 7/8" | 1 | 41-215 |
| 11" ML, HSM | 3" | 5/8" | 2 | 41-913 |
| 11" ML, HSM | 3" | 3/4" | 2 | 41-914 |
| 11" ML, HSM | 3" | 7/8" | 2 | 41-915 |
| 11" ML, HSM | 3" | 1" | 2 | 41-916 |
| *14" ML | 5" | 3/4" | 6 | 41-534 |
| *14" ML | 5" | 7/8" | 6 | 41-535 |
| *14" ML | 5" | 1" | 6 | 41-536 |
| *14" ML | 5" | 1 1/8" | 6 | 41-537 |
| Mill | — | 5/8" | 4 | 41-893 |
| Mill | — | 3/4" | 4 | 41-894 |

belts (Specially Constructed)

| Product Usage | Outside Circumference | Description | Wt., Lbs. | Cat. No. |
|---|-----------------------|---|-----------|----------|
| 10" ML, Cab. Mdl. | 36 1/2" | V-belt (two required) for variable speed drive. | 1/2 | 340 |
| 10" ML, Bench Mdl. | 27 3/4" | Belt (two required), variable speed drive type. | 5/8 | 49-120 |
| 10" ML, Bench and Cab. Mdl. | 30 1/8" | V-belts (matched pair) for spindle drive. | 1 | 49-121 |
| 11" ML, HSM | 34 1/2" | Belt, variable speed drive type. | 1/2 | 25-500 |
| 11" ML, HSM | 50 3/4" | V-belts (matched pair) for spindle drive. | 1/2 | 25-502 |
| 25-220 and 25-264 Spindle Speed Changers 14" ML | 1/4" dia. x 29 1/4" | O-belt, stretch type (not specially constructed). | 2 oz. | 49-097 |
| 14" ML | 47" | Variable speed belt, upper. | 2 | 49-086 |
| 14" ML | 36" | Variable speed belt, lower. | 1 | 49-087 |
| 14" ML | 51" | V-belt (matched pair) for spindle drive. | 1 | 49-129 |
| Mill | 28 1/8" | V-belt. | 1 | 272 |



*For new style variable speed drive and No. 25-220 or 25-264 Power Driven Spindle Speed Changer.

ROCKWELL...
your
most complete
tooling source!



YOUR ROCKWELL WARRANTY

Rockwell is proud of the quality of the power tools which it sells. The component parts of our tools are inspected at various stages of production, and each finished tool is subjected to a final inspection before it is placed in its specially designed carton to await shipment. Because of our confidence in our engineered quality, we agree to repair or replace any part or parts of Rockwell Power Tools or Rockwell Power Tool Accessories which examination proves to be defective in workmanship or material. In order to take advantage of this guarantee, the Delta, or other Rockwell machine part or accessory must be returned prepaid to the appropriate factory, Rockwell service center or authorized service station for our examination. This guarantee, of course, does not include repair or replacement required because of misuse, abuse or normal wear and tear. Repairs made by other than our factory, service center or authorized service station, relieves Rockwell of further liability under this guarantee. This guarantee is made expressly in place of all other guarantees expressed or implied with respect to fitness, merchantability or quality.

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For further information on Rockwell Machine Tools, contact:

In the United States
ROCKWELL MANUFACTURING COMPANY
400 N. Lexington Avenue
Pittsburgh, Pennsylvania 15208

In Canada
ROCKWELL MANUFACTURING COMPANY OF CANADA, LTD.
P. O. Box 978
Montreal, Quebec

In Latin America and Caribbean area
ROCKWELL INTERNATIONAL, INC.
The Rockwell Building
Pittsburgh, Pennsylvania 15208
Cable Address: ROCKCO

In Europe, Africa, and the Middle East:
ROCKWELL INTERNATIONAL, S.A.
81 Rue de la Serbellone
Geneva, Switzerland
Cable Address: ROCKINT

In Southeast Asia and the Far East
ROCKWELL INTERNATIONAL, LTD.
P. O. Box 15067
General Post Office
Hong Kong
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Distributors throughout the world.

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