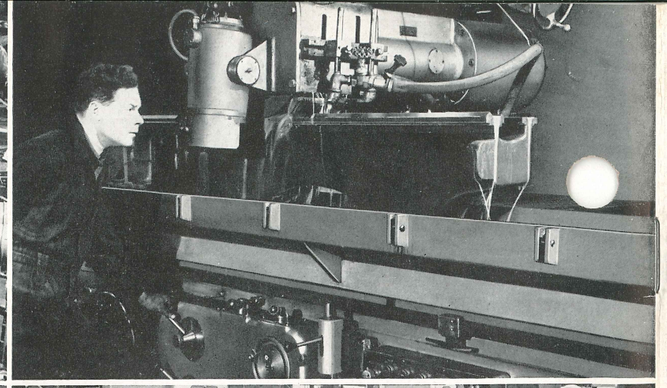
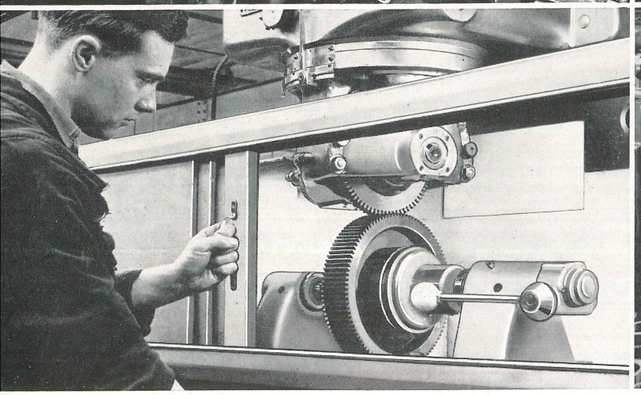
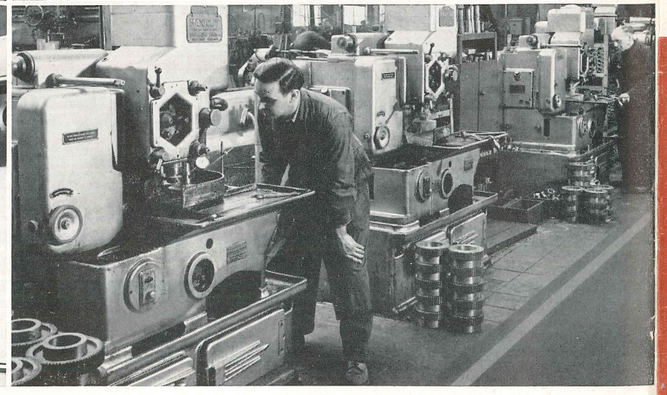






Clausing-Colchester lathes are produced in England by Europe's largest manufacturer of precision lathes — recognized as the leader in its field for more than fifty years.

They are built to American standards of tool room lathe accuracy. All parts are completely interchangeable and replacement parts are readily available. Screws and bolts used in assembly have threads and heads that are standard in the United States.

Clausing-Colchester lathes are backed by the coast-to-coast sales, service and dealer organization of one of America's leading machine tool manufacturers — Clausing.

Clausing-Colchester lathes are guaranteed to equal or exceed the standards of accuracy as represented.

They are guaranteed against defects in material and workmanship for a period of one year, subject to standard warranty procedure. Design and construction are subject to modification and improvement without notice.

CLAUSING COLCHESTER

CLAUSING DIVISION, ATLAS PRESS CO., KALAMAZOO, MICH., U. S. A.

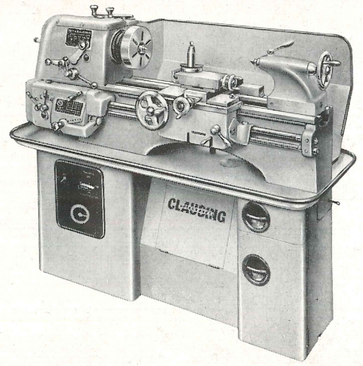
CATALOG 6575—3 IB5M

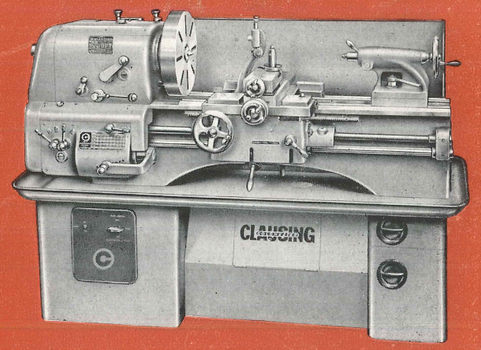
PRINTED IN U.S.A.

1950- mid CO

# CLAUSING COLCHESTER

## 13" 15" 17"

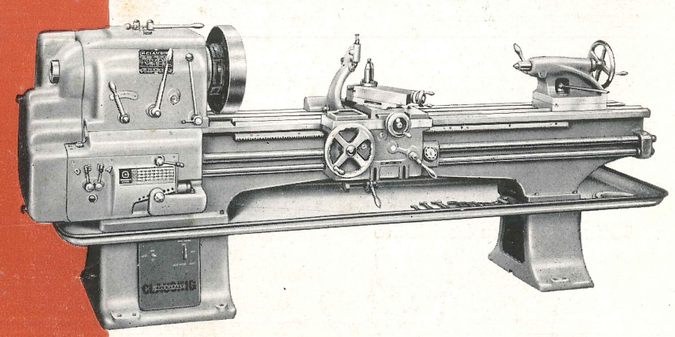



## GEARED-HEAD

## PRECISION LATHES

SOLD BY:

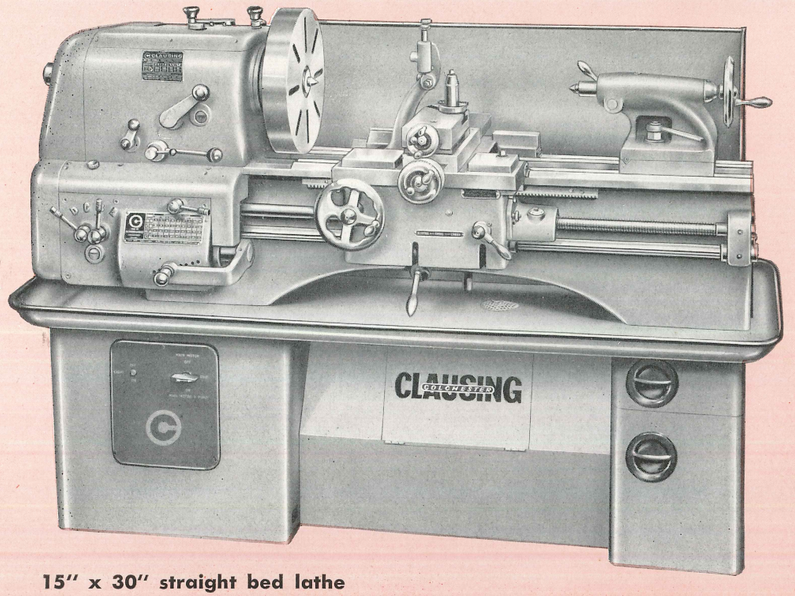


CLAUSING DIV. ATLAS PRESS

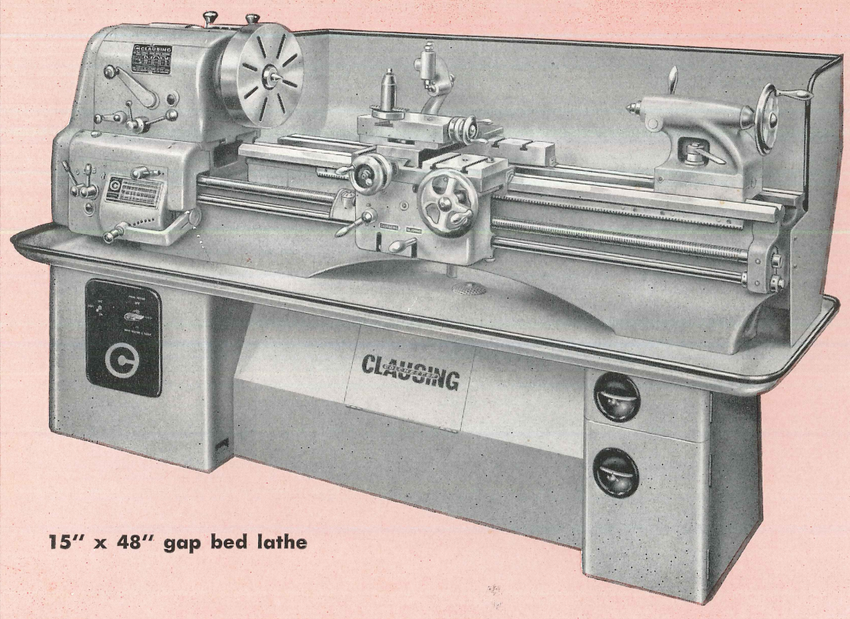
KALAMAZOO, MICHIGAN, U.S.A.

# CLAUSING COLCHESTER

## 13", 15", 17", heavy duty geared head precision lathes




15" x 30" straight bed lathe




15" x 48" gap bed lathe

Clausing-Colchester lathes are the achievement of over 50 years' experience in the manufacture of precision lathes.

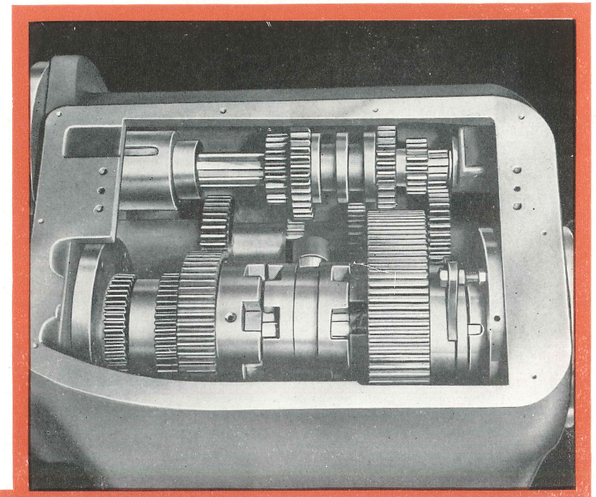
Their outstanding value and record of performance are the result of this experience, and the modern production facilities used in their manufacture. Highly specialized precision equipment, coupled with a unique system of tooling and gauging, assure the highest standards of accuracy, and uniformity of every part.

Clausing-Colchester lathes, manufactured in England, are the product of Europe's largest and most modern factory devoted exclusively to the manufacture of precision lathes. They are backed by the nation-wide Clausing sales, service and dealer organization.

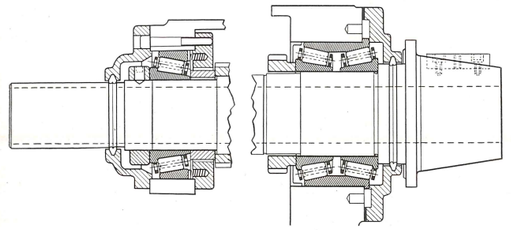


## Built to American standards of toolroom lathe accuracy

Clausing-Colchester geared headstocks are designed and built to deliver the power required for heavy-duty operations, and for smooth performance throughout the spindle-speed range. Gears are shaved, heat-treated. Gear shafts are multi-splined high-tensile steel — turn in phosphor bronze bearings. Splined shafts — no loose or sliding keys — assure high standards of accuracy and surface finish. Headstock is completely enclosed — entire gear drive mechanism travels in bath of oil.



Gear change and reverse levers are conveniently located. Front lever operates both starting switch and mechanical brake in drive pulley, a feature that permits rapid and sensitive control of machine.

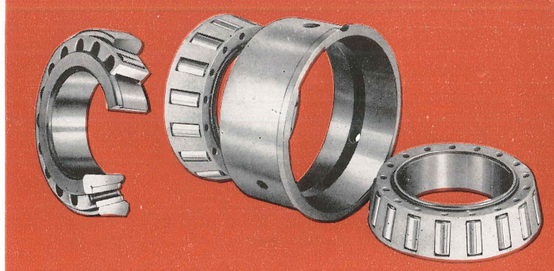


| SPINDLE CAPACITIES | | | |
|---|---|---|---|
| Lathe | 17" | 15" | 13" |
| Thru-Hole | 3-1/16" | 2-1/16" | 1-9/16" |
| Nose Taper Key Drive | L-2 | L-1 | L-0 |

Spindle bearings are larger — see chart at right.

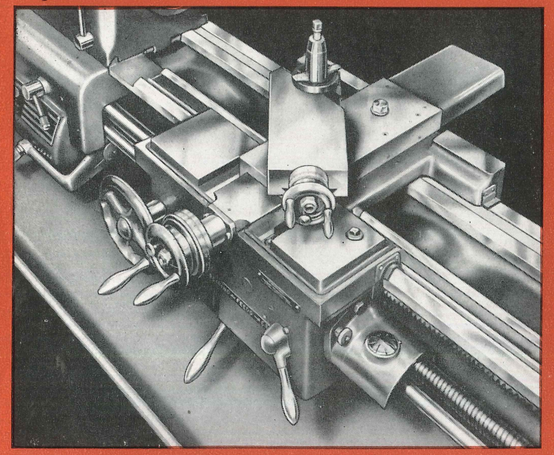
Front spindle bearing is double row tapered roller bearing — rear spindle bearing is single row tapered roller bearing, spring loaded for automatic adjustment. Both are Gamet Micron Precision Bearings with oil-flow lubrication — hole through bearing rollers assures maximum lubrication and cool running. Produced under strictly controlled conditions, these bearings are the most efficient and accurate known to industry. Evidence of the precision you can expect with Clausing-Colchester lathes is detailed on page 15.

Headstock spindles are high-tensile steel hammered forgings. Nose is American Standard taper key-lock — spindle may be reversed without danger of the chuck's coming off. Nose is hardened. Note — in chart at left — the larger sizes and capacities — greater than those of lathes in the Clausing-Colchester class.

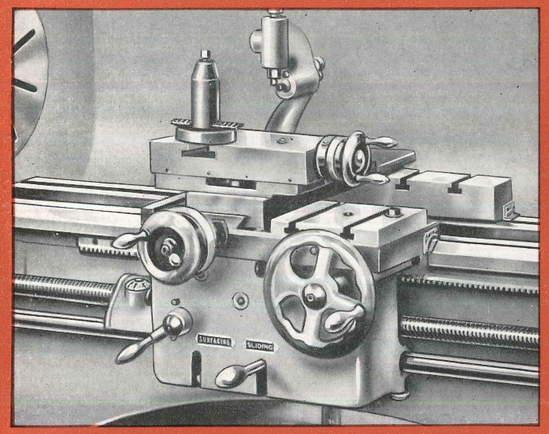


| Lathe | 17" | 15" | 13" |
|---|---|---|---|
| Front Spindle Bearing O. D. | 7½" | 5½" | 4" |
| Rear Spindle Bearing O. D. | 6" | 4⅜" | 3-9/16" |

# CLAUSING COLCHESTER | heavy duty, precision lathes

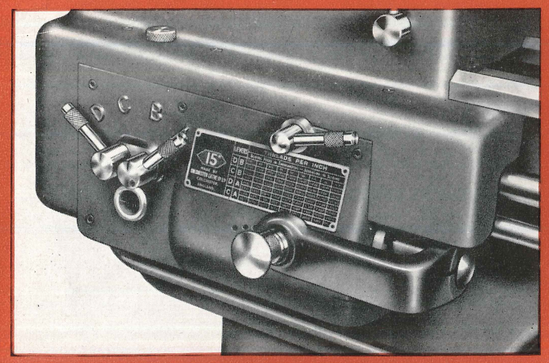


Apron is one-piece, double-walled — all shafts turn in two bearings — gear trains are protected against misalignment and dirt. Carriage has large bearing surfaces on bed, and is secured to bed by heavy plates bearing on front and rear ways. All surfaces of the saddle, cross slide and compound are precision ground. Large diameter micrometer dials reading in .001″ are fitted to both slides and can be set at zero and clamped for easy operation. Power feed and screw cutting controls are interlocked to prevent simultaneous engagement. Half nuts are Mehanite. Power feeds are engaged by a positive single lever control action. Thread dial is furnished.



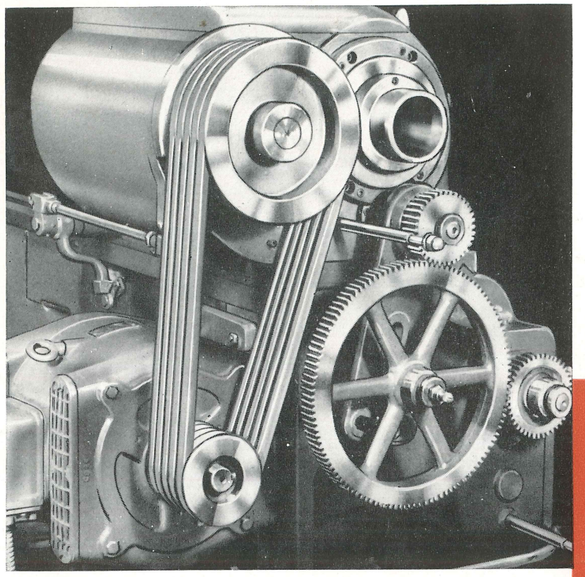
Note, in second illustration at left, the carriage provided with gap-bed lathes. Cross slide position brings cutting tool to outer edge of gap. Has boring-type tee-slotted saddle. Controls on apron are located away from gap, for operator convenience and safety.

Quick-change mechanism provides instant selection of 45 threads and feeds. Quick-change gear box is cast integrally with the bed for maximum strength. Box is totally enclosed, and mechanism runs in a bath of oil. Gears are shaved, high-tensile steel, and are carried on multi-splined high-tensile steel shafts. Shafts turn in phosphor bronze bearings.

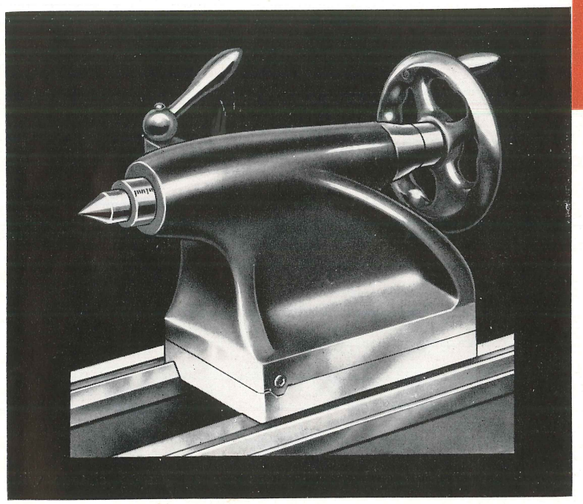


Power feeds are taken from a separate feed rod. The lead screw is used for threading *only* — another feature of design that gives you longer service and accuracy with a Clausing-Colchester. Feed rod has springball clutch that releases rod whenever the load becomes too great and automatically re-engages when strain is removed—carriage may be fed to positive stop. 13″ and 15″ lathe lead screws are protected by easy-to-replace shear pin in gear train.



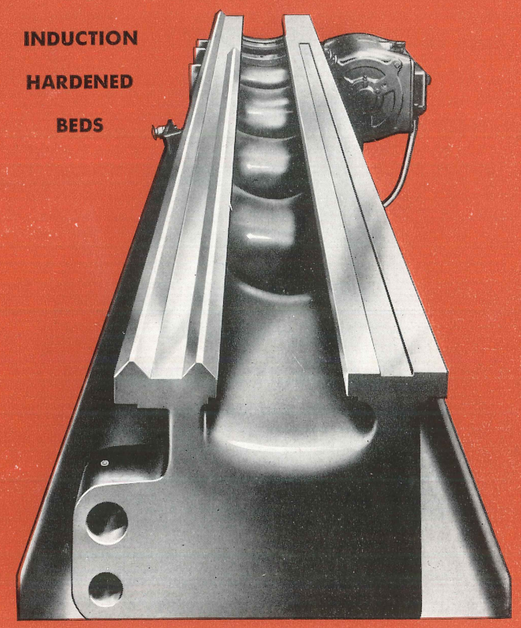


Drive is through multiple V-belts powered by heavy-duty motor furnished with lathe. Note choice of single and two speed motors. Drive is self-contained — motor is mounted at rear of headstock base below chip pan to keep out dirt, chips and coolant. Adjustment for belt tension is provided. V-belts are completely guarded. Electric panel in base has master control switch for magnetic starter. On-off switch furnished is air-break type controlled by lever on front of headstock. Reversing switch, available extra, see page 13, is furnished with linkage that mounts inside switch control-lever shaft.



Bed ways are induction hardened to a Brinell hardness of 500, and are precision ground parallel to extremely close tolerance. Beds are massive, dense castings — 50% steel, 50% iron — with elliptical cross ribbing for maximum rigidity. 17″ and 15″ lathes have two V-ways at front, two flat ways at rear. 13″ lathes have a V-way and flat way at both front and rear. Castings are rough machined and naturally aged before finish grinding. Gap bed lathes have removable block.

**INDUCTION HARDENED BEDS**

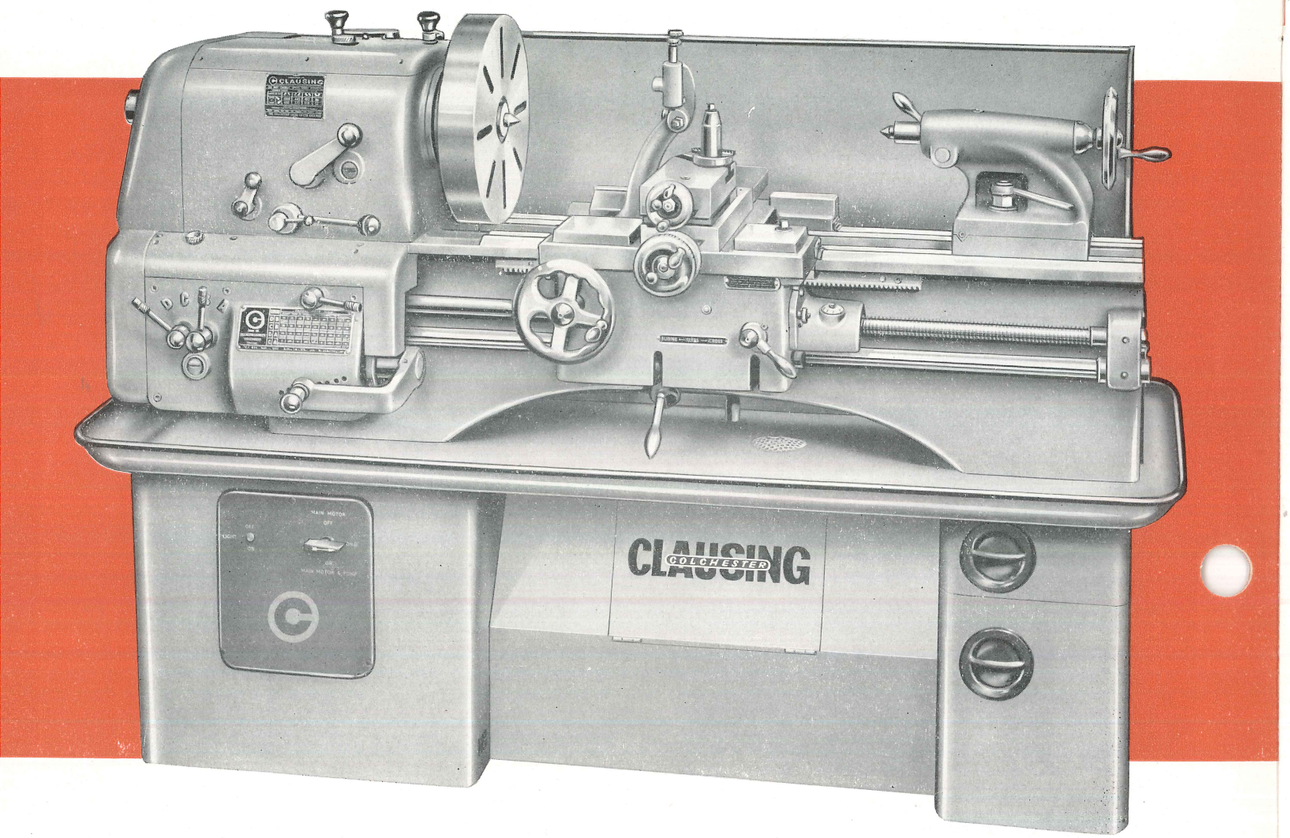


Husky tailstocks have large spindle and screw. Hole for spindle is honed with MicroMatic hones to superfinish standards for accuracy, rigidity, smooth operation. Spindles are graduated, have self-ejecting centers. Tailstock may be set over for taper turning — zero setting line simplifies resetting.

13″ and 15″ lathes are furnished with cabinet bases of welded steel columns, heavily cross ribbed to provide a firm foundation for the lathe and to keep vibration at a minimum. Built-in chip pan, splash guards and coolant tank. Tailstock pedestal has two shelves, and a drawer with lock.

# CLAUSING COLCHESTER

## 15-inch heavy duty geared head precision lathe




| Catalog Number | Swing Over Bed | Between Centers | Bed Length | Net Weight | Shipping Weight |
|---|---|---|---|---|---|
| | | ***STRAIGHT BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| 6574 | 15″ | 30″ | 65″ | 2100 lb. | 2700 lb. |
| 6575 | 15″ | 48″ | 83″ | 2250 lb. | 2970 lb. |
| | | **TWO SPEED MOTOR** | | | |
| 6534 | 15″ | 30″ | 65″ | 2100 lb. | 2700 lb. |
| 6535 | 15″ | 48″ | 83″ | 2250 lb. | 2970 lb. |
| | | ***GAP BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| 6576 | 15″ | 30″ | 65″ | 2100 lb. | 2700 lb. |
| 6577 | 15″ | 48″ | 83″ | 2250 lb. | 2970 lb. |
| | | **TWO SPEED MOTOR** | | | |
| 6536 | 15″ | 30″ | 65″ | 2100 lb. | 2700 lb. |
| 6537 | 15″ | 48″ | 83″ | 2250 lb. | 2970 lb. |

**EQUIPMENT FURNISHED**

Cabinet base with built-in chip pan, splash guards and coolant tank.

One-speed or two-speed motor.

Electric panel with master control switch for magnetic starter—all electrical controls are of American manufacture.

Air-break type on-off switch.

14″ face plate, 8″ driving plate.

Two No. 3 MT centers, reducing sleeve.

Thread dial indicator.

Follower rest, tool post. Change gear.

Wrenches.

Instruction and Parts List manual.

Design and specifications are subject to change without notice. Weights shown are approximate.



# SPECIFICATIONS

## CAPACITIES AND CLEARANCES

Swing over bed ..... 15″
Swing over cross slide ..... 8¾″
Swing over carriage wings ..... 14″
Distance between centers, flush ..... 30″ or 48″
Face plate, dia. ..... 14″
Driving plate, dia. ..... 8″
Follower rest, capacity ..... 2½″
Steady rest, capacity ..... 5″

## HEADSTOCK

Hole through spindle ..... 2-1/16″
Spindle nose, A.S. taper key drive ..... L-1
Taper in spindle nose bushing ..... No. 3 MT
Spindle center ..... No. 3 MT

Spindle bearings, Gamet Micron Precision tapered roller bearings

Front ..... double row
Rear ..... single row, spring loaded

Spindle bearing outside diameters

Front ..... 5½″
Rear ..... 4⅜″

## BED

Ways ..... 2 V, 2 Flat
Length ..... 65″ or 83″
Width ..... 10″
Depth at ends ..... 14⅞″
Depth at center ..... 10″

## TAILSTOCK

Spindle, dia. ..... 1½″
Center ..... No. 3 MT
Spindle travel ..... 6″
Spindle graduated ..... 0″ to 6″ by ⅛″

## CARRIAGE AND COMPOUND

Carriage length ..... 17½″
Width of carriage bridge ..... 8″
Width of cross slide ..... 5⅛″
Width of compound rest ..... 4½″
Cross slide travel ..... 7″
Compound rest travel ..... 4⅝″
Tool post, slot ..... for ⅝″ square tools

## SPINDLE SPEEDS

Spindle speeds, *with* 1 *speed motor* ..... 8
Speed range, *with* 1 *speed motor*, RPM ... 40, 77, 109, 161, 205, 305, 425, 800

Spindle speeds, *with* 2 *speed motor* ..... 16

Speed range, *with* 2 *speed motor*, RPM ..... 30, 58, 60, 82, 115, 120, 153, 163, 229, 241, 307, 319, 457, 600, 637, 1200

## MOTORS

One speed ... 3 HP, 1720 RPM, 3 ph., 220-440 V, 60 C

Two-speed ..... 2½—5 HP, 900-1800 RPM, 3 ph. 220 or 440 V, 60 C
*Specify voltage when ordering.*

Number of V-belts ..... 3

## THREADS AND FEEDS

Lead screw, dia. ..... 1¼″
threads per inch, Acme ..... 4
Feed rod, dia. ..... 1″
Number of threads ..... 45
Range .....
4, 4½, 4¾, 5, 5½, 5¾, 6, 6½, 7, 8, 9, 9½, 10, 11, 11½, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, 26, 28, 32, 36, 38, 40, 44, 46, 48, 52, 56, 64, 72, 76, 80, 88, 92, 96, 104, 112
Number of feeds ..... 45
Feed range ..... 0.048″ to 0.0017″

*NOTE: Threads 4 thru 7 are obtained by using change gear furnished.*

## GAP BED MODELS

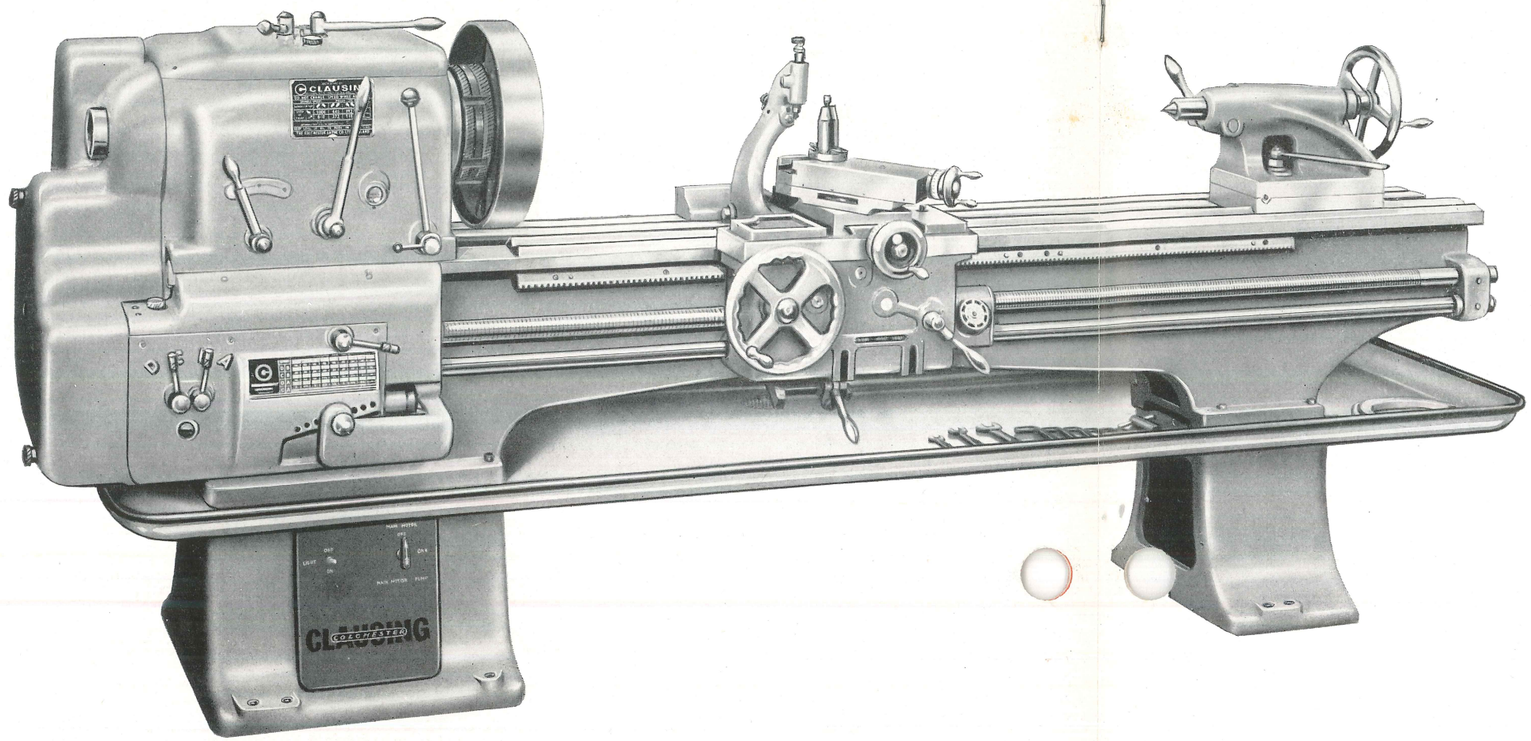
Swing in gap ..... 24″
Length of gap in front of face plate ..... 6″

NOTE: Other specifications similar to straight bed model.

Finish, all models, light machine tool grey.

# CLAUSING COLCHESTER

## 17-inch heavy duty geared head precision lathes



| Catalog Number | Swing Over Bed | Between Centers | Bed Length | Net Weight | Shipping Weight |
|---|---|---|---|---|---|
| | | ***STRAIGHT BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| **6582** | 17″ | 75″ | 120″ | 4020 lb. | 5160 lb. |
| | | **TWO SPEED MOTOR** | | | |
| **6542** | 17″ | 75″ | 120″ | 4020 lb. | 5160 lb. |
| | | ***GAP BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| **6594** | 17″ | 54″ | 96″ | 3720 lb. | 4620 lb. |
| **6583** | 17″ | 75″ | 120″ | 4020 lb. | 5160 lb. |
| | | **TWO SPEED MOTOR** | | | |
| **6554** | 17″ | 54″ | 96″ | 3720 lb. | 4620 lb. |
| **6543** | 17″ | 75″ | 120″ | 4020 lb. | 5160 lb. |

**EQUIPMENT FURNISHED**

Cast-iron mounting bases with chip and coolant tray.

One-speed or two-speed motor.

Electric panel with master control switch for magnetic starter—all electrical controls are of American manufacture.

Air-break type on-off switch.

16″ face plate, 10″ driving plate.

Two No. 4 MT centers, reducing sleeve.

Thread dial indicator.

Follower rest, tool post. Change gear.

Wrenches.

Instruction and Parts List manual.

Design and specifications are subject to change without notice. Weights shown are approximate.

**CAPACITIES AND CLEARANCES**

Swing over bed ..... 17″
Swing over cross slide ..... 10 1/8″
Swing over carriage wings ..... 16″
Distance between centers, flush ....54″ or 75″
Face plate, dia. ..... 16″
Driving plate, dia. ..... 10″
Follower rest, capacity ..... 3″
Steady rest, capacity ..... 6″

**HEADSTOCK**

Hole through spindle ..... 3-1/16″
Spindle nose, A.S. taper key drive .....L-2
Taper in spindle bushing .....No. 4 MT
Spindle center .....No. 4 MT
Spindle bearings, Gamet Micron Precision tapered roller bearings
Front .....double row
Rear .....single row, spring loaded

Spindle bearing outside diameters
Front ..... 7 1/2″
Rear ..... 6″

**BED**

Ways ..... 2 V, 2 Flat
Length .....96″ or 120″
Width ..... 12 7/8″
Depth at ends ..... 18″
Depth at center ..... 11 3/4″

**TAILSTOCK**

Spindle, dia. ..... 2″
Center .....No. 4 MT
Spindle travel ..... 6 3/4″
Spindle graduated .....0″ to 6″ by 1/8″

**CARRIAGE AND COMPOUND**

Carriage length ..... 20″
Width of carriage bridge .....8 3/4″
Width of cross slide .....6 3/4″
Width of compound rest .....5 1/2″
Cross slide travel .....10 1/2″
Compound rest travel ..... 6″
Tool post, slot .....for 3/4″ square tools

**SPINDLE SPEEDS**

Spindle speeds, *with 1 speed motor* ..... 8
Speed range, *with 1 speed motor,* RPM .....37, 56, 87, 125, 180, 270, 415, 600
Spindle speeds, *with 2 speed motor* ..... 16
Speed range, *with 2 speed motor,* RPM.....28, 42, 55, 65, 84, 94, 130, 135, 187, 202, 270, 311, 405, 450, 622, 900

**MOTORS**

One speed .....5 HP, 1720 RPM, 3 ph, 220-440 V, 60 C
Two speed .....4 - 8 HP, 900 - 1800 RPM, 3 ph, 220 or 440 V, 60 C

*Specify voltage when ordering.*

Number of V-belts ..... 5

**THREADS AND FEEDS**

Lead screw, dia. ..... 1 1/2″
threads per inch, Acme ..... 4
Feed rod, dia. ..... 1 1/4″
Number of threads ..... 45
Range .....
4, 4 1/2, 4 3/4, 5, 5 1/2, 5 3/4, 6, 6 1/2, 7, 8, 9, 9 1/2, 10, 11, 11 1/2, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, 26, 28, 32, 36, 38, 40, 44, 46, 48, 52, 56, 64, 72, 76, 80, 88, 92, 96, 104, 112
Number of feeds ..... 45
Feed range ..... 0.050″ to 0.0018″

*NOTE: Threads 4 thru 7 are obtained by using change gear furnished.*

**GAP BED MODELS**

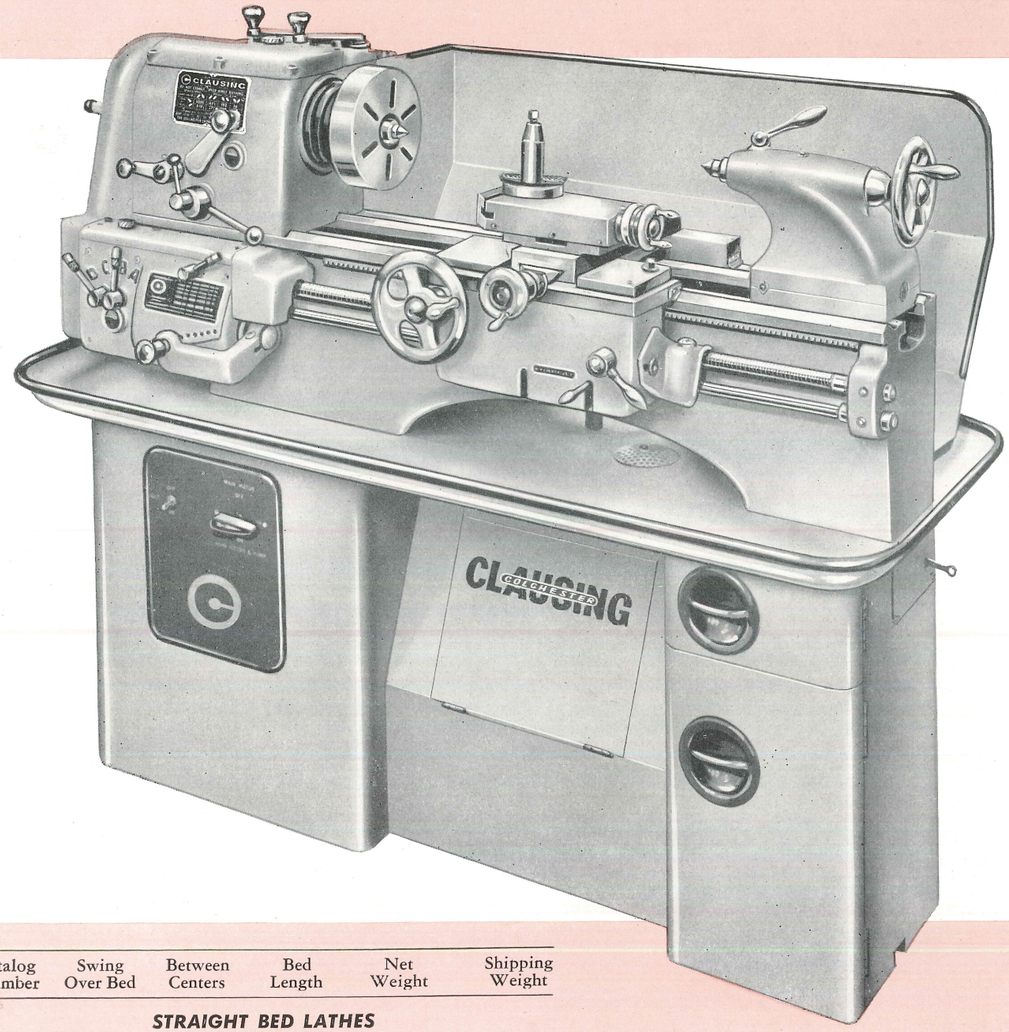
Swing in gap ..... 28″
Length of gap in front of face plate .....9 1/4″

NOTE: Other specifications similar to straight bed models.

Finish, all models, light machine tool grey.

# CLAUSING COLCHESTER

## 13″ heavy duty geared head precision lathes




| Catalog Number | Swing Over Bed | Between Centers | Bed Length | Net Weight | Shipping Weight |
|---|---|---|---|---|---|
| | | ***STRAIGHT BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| **6564** | 13″ | 24″ | 52½″ | 1350 lb. | 1860 lb. |
| **6565** | 13″ | 36″ | 64″ | 1410 lb. | 1920 lb. |
| | | **TWO SPEED MOTOR** | | | |
| **6524** | 13″ | 24″ | 52½″ | 1350 lb. | 1860 lb. |
| **6525** | 13″ | 36″ | 64″ | 1410 lb. | 1920 lb. |
| | | ***GAP BED LATHES*** | | | |
| | | **ONE SPEED MOTOR** | | | |
| **6566** | 13″ | 24″ | 52½″ | 1350 lb. | 1860 lb. |
| **6567** | 13″ | 36″ | 64″ | 1410 lb. | 1920 lb. |
| | | **TWO SPEED MOTOR** | | | |
| **6526** | 13″ | 24″ | 52½″ | 1350 lb. | 1860 lb. |
| **6527** | 13″ | 36″ | 64″ | 1410 lb. | 1920 lb. |

**EQUIPMENT FURNISHED**

Cabinet base with built-in chip pan, splash guards and coolant tank.
One-speed or two-speed motor.
Electric panel with master control switch for magnetic starter—all electrical controls are of American manufacture.
Air-break type on-off switch.
12″ face plate, 6″ driving plate.
Two No. 3 MT centers, reducing sleeve.
Thread dial indicator.
Follower rest, tool post. Change gear.
Wrenches.
Instruction and Parts List Manual.

Design and specifications are subject to change without notice. Weights shown are approximate.



# SPECIFICATIONS

## CAPACITIES AND CLEARANCES

Swing over bed ..... 13″
Swing over cross slide ..... 8″
Swing over carriage wings ..... 12″
Distance between centers, flush .....24″ or 36″
Face plate, dia. ..... 12″
Driving plate, dia. ..... 6″
Follower rest, capacity ..... 2″
Steady rest, capacity ..... 4″

## HEADSTOCK

Hole through spindle ..... 1-9/16″
Spindle nose, A.S. taper key drive .....L-0
Taper in spindle nose bushing .....No. 3 MT
Spindle center .....No. 3 MT
Spindle bearings, Gamet Micron Precision tapered roller bearings
  Front .....double row
  Rear .....single row, spring loaded
Spindle bearing outside diameters
  Front ..... 4″
  Rear .....3-9/16″

## BED

Ways ..... 2 V, 2 Flat
Length .....52½″ or 64″
Width ..... 8½″
Depth at ends ..... 11⅞″
Depth at center ..... 8″

## TAILSTOCK

Spindle, dia. .....1⅜″
Center .....No. 3 MT
Spindle travel ..... 4¼″
Spindle graduated .....0″ to 4¼″ by ⅛″

## CARRIAGE AND COMPOUND

Carriage length .....13½″
Width of carriage bridge ..... 6″
Width of cross slide ..... 4″
Width of compound rest ..... 3½″
Cross slide travel ..... 6½″
Compound rest travel .....3¾″
Tool post, slot .....for 9/16″ square tools

## SPINDLE SPEEDS

Spindle speeds, *with 1 speed motor* ..... 8
Speed range, *with 1 speed motor*, RPM....52, 86, 118, 192, 272, 445, 610, 1000
Spindle speeds, *with 2 speed motor* ..... 16
Speed range, *with 2 speed motor*, RPM..39, 65, 78, 88, 129, 144, 177, 204, 288, 334, 408, 457, 667, 750, 915, 1500

## MOTORS

One speed ....1½ HP, 1720 RPM, 3 ph, 220-440 V, 60 C
Two speed .....1½ - 3 HP, 900 - 1800 RPM, 3 ph, 220 or 440 V, 60 C
*Specify voltage when ordering.*
Number of V-belts ..... 2

## THREADS AND FEEDS

Lead screw, dia. .....1⅛″
  threads per inch, Acme ..... 6
Feed rod, dia. ..... ¾″
Number of threads ..... 45
Range .....
  4, 4½, 4¾, 5, 5½, 5¾, 6, 6½, 7, 8, 9, 9½, 10, 11, 11½, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, 26, 28, 32, 36, 38, 40, 44, 46, 48, 52, 56, 64, 72, 76, 80, 88, 92, 96, 104, 112
Number of feeds ..... 45
Feed range ..... 0.068″ to 0.0025″

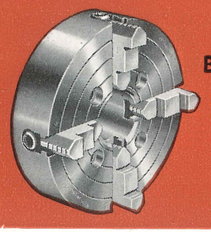
*NOTE: Threads 4 thru 7 are obtained by using change gear furnished.*

## GAP BED MODELS

Swing in gap ..... 18″
Length of gap in front of face plate .....4½″

NOTE: Other specifications similar to straight bed model.
Finish, all models, light machine tool grey.

# ACCESSORIES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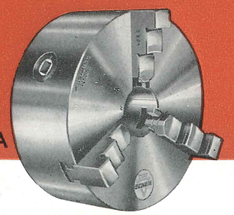
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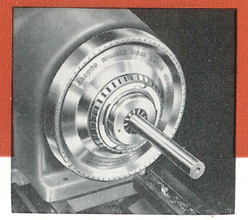
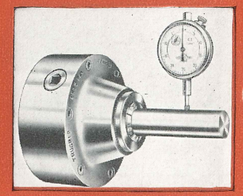

D


C

## BURNERD CHUCKS

Chuck bodies are Meehanite castings for greater strength and long accurate service. Scrolls of universal chucks are heat treated nickel chrome steel, pinions are case hardened nickel steel. 4-jaw independent chucks have heat treated alloy steel jaw-operating screws. Jaws are case hardened steel — bearing and gripping surfaces are ground. Mount directly on lathe spindle nose — *no back plates required*. Wrench furnished.

### A 3-JAW UNIVERSAL SCROLL CHUCKS

| No. | Dia. | For Spindle | Jaws Furnished | Ship. Wt. |
|---|---|---|---|---|
| **13-201** | 7½″ | ASA—L-0 | 2 sets, solid | 43 lb. |
| **13-211** | 7½″ | ASA—L-0 | Master with reversible hard top | 43 lb. |
| **15-401** | 9″ | ASA—L-1 | 2 sets, solid | 68 lb. |
| **15-411** | 9″ | ASA—L-1 | Master with reversible hard top | 68 lb. |
| **17-501** | 12″ | ASA—L-2 | 2 sets, solid | 135 lb. |
| **17-517** | 12″ | ASA—L-2 | Master with reversible hard top | 135 lb. |

Chucks furnished with two sets of jaws have one inside set, one outside set. Those furnished with master jaws have one set of reversible hard tops. Soft blank jaws, and master jaws with soft tops are also available — data on request.

### B 4-JAW INDEPENDENT CHUCKS

| No. | Dia. | For Spindle | For Lathe | Ship. Wt. |
|---|---|---|---|---|
| **13-202** | 10″ | ASA—L-0 | 13″ | 77½ lb. |
| **15-402** | 12″ | ASA—L-1 | 15″ | 111½ lb. |
| **17-502** | 16″ | ASA—L-2 | 17″ | 187 lb. |

## CHUCK BACK PLATES

Meehanite castings with hole finish-bored for tapered spindle nose.

**No. 13-218** BACK PLATE for ASA—L-0 spindle nose. 25 lb.
**No. 15-417** BACK PLATE for ASA—L-1 spindle nose. 35 lb.
**No. 17-519** BACK PLATE for ASA—L-2 spindle nose. 57 lb.

### C SPINDLE NOSE COLLET CHUCK

Trugrip precision spindle nose collet chucks save time and improve work accuracy. Collet is operated by simply turning a key — no need to hold or lock lathe spindle, no draw tube handwheel to tighten. Provides a rigid uniform grip on work that eliminates risk of distortion. Accuracy is guaranteed to .001″ one inch from collet face. Collets are listed below.

**No. 13-206** COLLET CHUCK for ASA—L-0 spindle nose. Less collet. Capacity, 1/16″ to 1″ dia. No. 13-207 Round Collets for above — specify diameter. 10 lb.

**No. 15-406** COLLET CHUCK for ASA—L-1 spindle nose. Less collet. Capacity, 3/16″ to 2″ dia. No. 15-407 Round Collets for above — specify diameter. 28 lb.

**No. 17-506** COLLET CHUCK for ASA—L-2 spindle nose. Less collet. Capacity, 3/16″ to 2″ dia. No. 17-507 Round Collets for above — specify diameter. 28 lb.

### D JACOBS COLLET CHUCK

Equips Clausing-Colchester 13″ and 15″ lathes for fast, accurate chucking of round work fed through the spindle. Mounts directly on spindle — compact design permits chucking work close to spindle nose.

9″ dia. handwheel is solid aluminum — turns with a flick of the wrist. Impact tightening assures firm, even grip. Forged alloy steel body is hardened and ground. All other parts of body are hardened and ground alloy steel. Collets, extra, are positive gripping "rubber-flex".

**No. 91-T0** JACOBS COLLET CHUCK for ASA—L-0 spindle of 13″ lathe. 16 lb.

**No. 91-T1** JACOBS COLLET CHUCK for ASA—L-1 spindle of 15″ lathe. 16 lb.

## JACOBS ROUND COLLETS

| Collet No. | Collet Range | Wt. Lb. | Collet No. | Collet Range | Wt. Lb. |
|---|---|---|---|---|---|
| **7553** | 1/16″ - 1/8″ | 1 | **7558** | 5/8″ - 3/4″ | 1 |
| **7554** | 1/8″ - 1/4″ | 1 | **7559** | 3/4″ - 7/8″ | 1 |
| **7555** | 1/4″ - 3/8″ | 1 | **7560** | 7/8″ - 1″ | 1 |
| **7556** | 3/8″ - 1/2″ | 1 | **7561** | 1″ - 1 1/8″ | 1 |
| **7557** | 1/2″ - 5/8″ | 1 | **7562** | 1 1/8″ - 1 1/4″ | 1 |
| | | | **7563** | 1 1/4″ - 1 3/8″ | 1 |

**No. 7593** JACOBS HEXAGON COLLETS for Nos. 91-T0 and 91-T1 chucks available in 16th between 1/4″ and 1″. *Specify diameter.*

**No. 7594** JACOBS SQUARE COLLETS for Nos. 91-T0 and 91-T1 chucks available in 16ths between 1/4″ and 1″. *Specify diameter.*

## FACE PLATES for GAP BED LATHES

Finish machined, ready to mount on lathe spindle nose.

**No. 13-203** 18″ FACE PLATE for ASA—L-0 spindle nose. 65 lb.
**No. 15-403** 21″ FACE PLATE for ASA—L-1 spindle nose. 105 lb.
**No. 17-503** 25″ FACE PLATE for ASA—L-2 spindle nose. 180 lb.

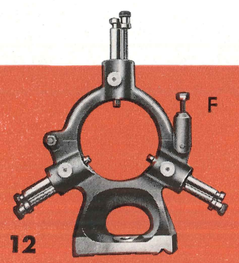
### E PLAIN TAPER ATTACHMENTS

Taper attachments for 15″ and 17″ lathes cut external or internal tapers up to 12″ long at one setting — 13″ lathe, 10″ at one setting. Simply reset along bed for longer work. Two sets of graduations show degrees of taper and inches per foot. Range, 9° both sides of center line.

**No. 13-209** TAPER ATTACHMENT for Clausing-Colchester 13″ lathes. 45 lb.

**No. 15-409** TAPER ATTACHMENT for Clausing-Colchester 15″ lathes. 85 lb.

**No. 17-510** TAPER ATTACHMENT for Clausing-Colchester 17″ lathes. 96 lb.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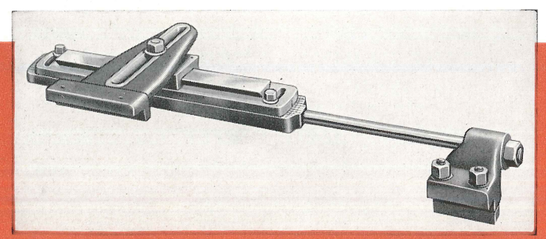
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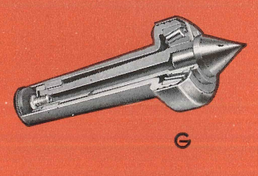

G



### F STEADY REST

**No. 13-210** STEADY REST for 13″ lathes. 4″ dia. maximum bar capacity. 24 lb.

**No. 15-410** STEADY REST for 15″ lathes. 5″ dia. maximum bar capacity. 40 lb.

**No. 17-511** STEADY REST for 17″ lathes. 6″ dia. maximum bar capacity. 60 lb.

### G GAMET ROTATING CENTERS

Gamet rotating centers are ideal for high speeds and heavy roughing cuts. Point rotates on tapered roller bearings. Bearings are grease packed, pre-loaded, and sealed. 60° replaceable points.

**No. 13-215** GAMET ROTATING CENTER with No. 3 MT shank for 13″ lathes. 2 lb.

**No. 15-421** GAMET ROTATING CENTER with No. 3 MT shank for 15″ lathes. 2 lb.

**No. 17-516** GAMET ROTATING CENTER with No. 4 MT shank for 17″ lathes. 3 lb.

### H ENCO Self-Indexing HEX BED TURRETS

| Model No. | For Lathe | Hex. Head Dims. Across Flats | Hex. Head Dims. Face Dims. | Finish Bore To | Slide Length | Slide Total Travel | Slide Working Travel |
|---|---|---|---|---|---|---|---|
| 13-651 | 13″ | 5⅝″ | 2⅞″ x 3″ | 1″ | 16½″ | 7½″ | 6½″ |
| 15-650 | 15″ | 7″ | 3½″ x 4″ | 1¼″ | 16½″ | 7½″ | 6½″ |
| 17-650 | 17″ | 7″ | 3½″ x 4″ | 1¼″ | 16½″ | 7½″ | 6½″ |

*Turret must be fitted to lathe bed, and holes for tool holders must be bored and reamed on lathe with which turret is to be used.*

### I ENCO TURRET TOOL POST

Mounts in tool post slot. Each tool has 3 working positions.

| Order No. | For Lathe | Tool Size Range | Tool Block Specifications | Shipping Weight |
|---|---|---|---|---|
| 13-4½-S | 13″ | ¾″ | 4 TOOL—12 POSITION 4½″ sq. x 2¼″ thick | 15 lb. |
| 15-4½-R | 15″ | 1″ or #1 HSS tool holder | 4 TOOL—12 POSITION 4½″ sq. x 2¾″ thick | 17 lb. |
| 17-6-S | 17″ | 1¼″ or #2 HSS tool holder | 4 TOOL—12 POSITION 6″ sq. x 3 3/16″ thick | 33 lb. |

### J MICRO CARRIAGE STOPS

Clamps on front bed way. Micrometer control graduated in .001 inch — hardened stop locks securely in any position. Will not automatically stop carriage.

**No. 13-2000** MICRO CARRIAGE STOP for Clausing 13″ lathes. 3 lb.
**No. 15-4000** MICRO CARRIAGE STOP for Clausing 15″ lathes. 3 lb.
**No. 17-5000** MICRO CARRIAGE STOP for Clausing 17″ lathes. 3½ lb.

### K COOLANT SYSTEMS

Unit consists of motor, circulating pump, switch, connections. Piping supplied is universal, with telescopic piping for feeding coolant in any position. Patented ball type shut-off valve permits easy control of coolant flow. Pump capacity is 3½ gallons per minute. Tank capacity, 5 gallons.

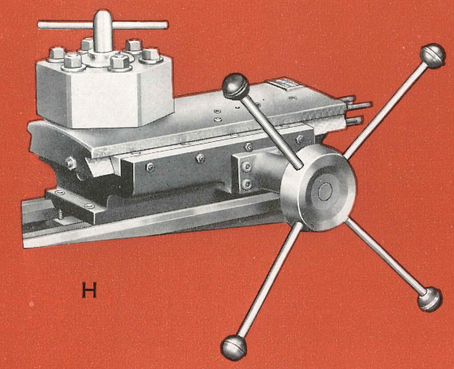
Pump for 13″ and 15″ lathes mounts in built-in tank in lathe base — both are readily accessible through door in front of lathe. Pump and tank for 17″ lathe mount on floor beneath chip pan. Switch mounts in electric control panel. System is installed and wired at factory when ordered with 13″ and 15″ lathes.

**No. 13-208** COOLANT SYSTEM for 13″ lathes.
**No. 15-408** COOLANT SYSTEM for 15″ lathes.
**No. 17-508** COOLANT SYSTEM for 17″ lathes.

## REVERSING SWITCH

Switch is furnished with linkage that mounts inside switch control-lever shaft. Installed and wired when ordered with lathe. Brake must be used to stop spindle before motor is reversed.

**No. 13-212** REVERSING SWITCH for 13″ lathe.
**No. 15-412** REVERSING SWITCH for 15″ lathe.
**No. 17-513** REVERSING SWITCH for 17″ lathe.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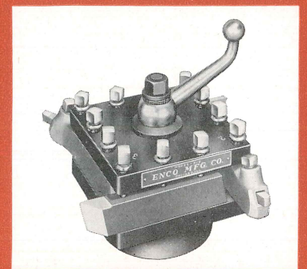

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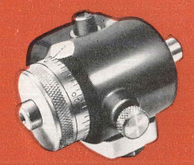
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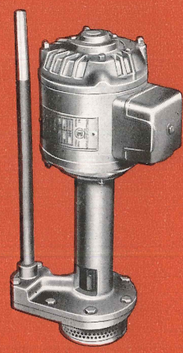
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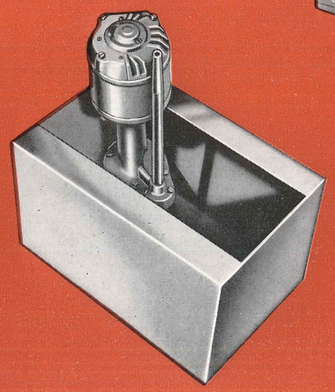
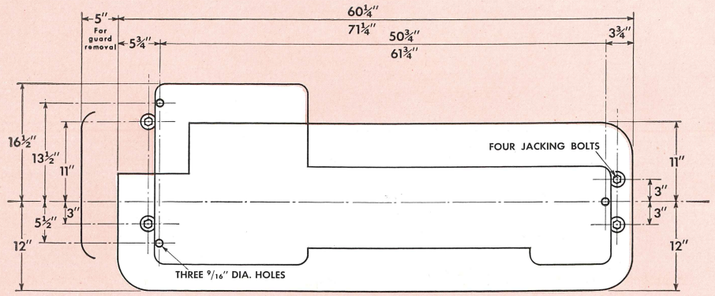
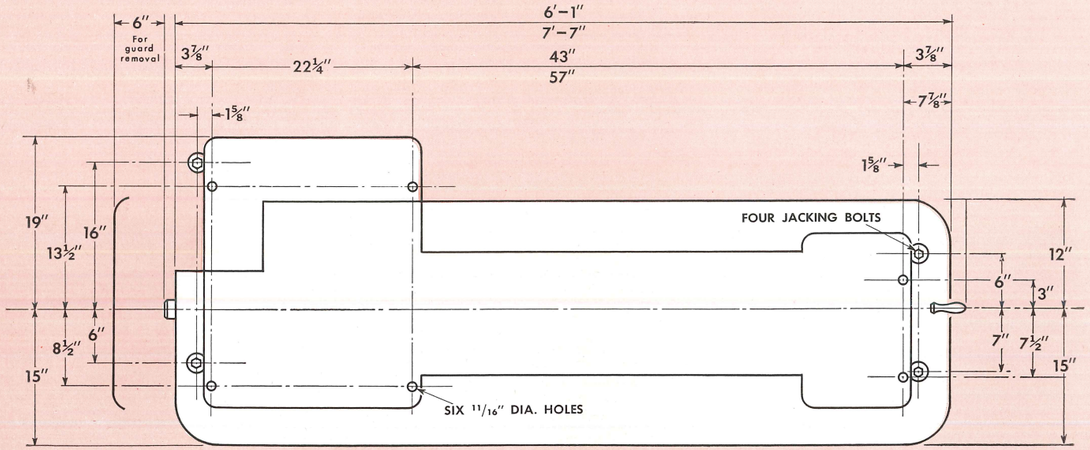


# CLAUSING COLCHESTER

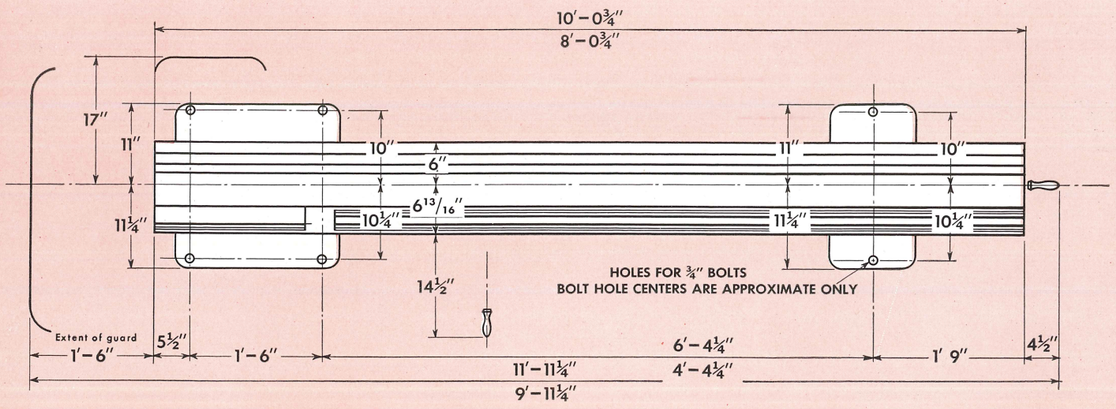
## 13″ LATHES




## 15″ LATHES




## 17″ LATHES

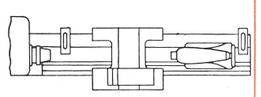
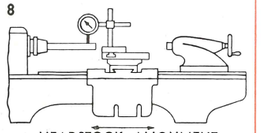
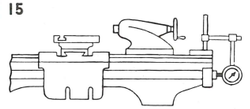
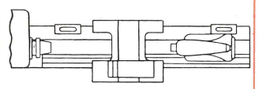
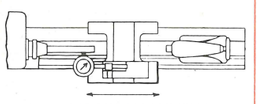
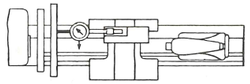
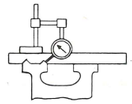
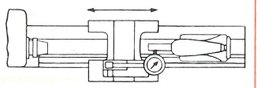
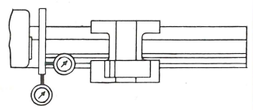
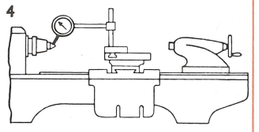
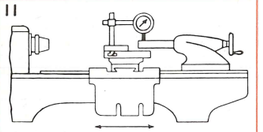
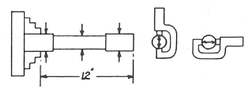
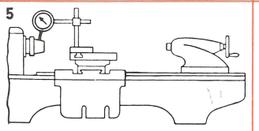
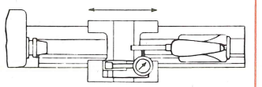
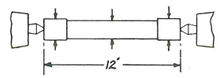
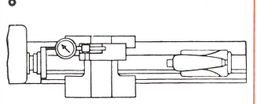
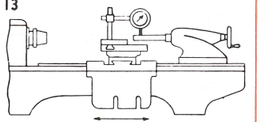
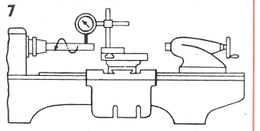
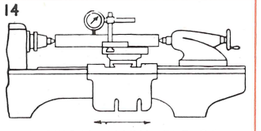





# Built to American standards of toolroom lathe accuracy

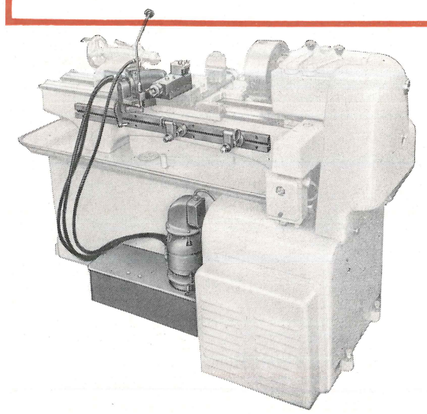
Each Clausing-Colchester lathe must pass tolerance tests such as those shown below. Inspection after inspection, and test after test — at every stage of manufacture and assembly — assure that every lathe measures up to rigid specifications of construction and performance.

The Clausing-Colchester name plate is a symbol of quality, precision and value.

| TEST | PERMISSIBLE ERROR / ACTUAL ERROR | TEST | PERMISSIBLE ERROR / ACTUAL ERROR | TEST | PERMISSIBLE ERROR / ACTUAL ERROR |
|---|---|---|---|---|---|
| 1  BED LEVEL—TRANSVERSE DIRECTION | When using Precision Level all Readings to be within 0.0006 in 12 in. of Bed Length | 8  HEADSTOCK ALIGNMENT—VERTICAL | High at end of 12 in. Test Bar rising towards Tailstock End 0 to 0.0005 | 15  LEAD SCREW CAM ACTION | Maximum 0.0003 |
| 2  BED LEVEL—LONGITUDINAL DIRECTION | When using Precision Level along Bed Maximum Reading to be within 0.0005 in 12 in. of Bed Length | 9  HEADSTOCK ALIGNMENT—HORIZONTAL | At end of 12 in. Test Bar 0 to + 0.0003 | 16  CROSS SLIDE ALIGNMENT | To face hollow or concave only on 12 in. diameter 0 to 0.0005 |
| 3  TAILSTOCK WAY ALIGNMENT | Maximum Reading along length of Bed 0.0005 in 48 in. | 10  TAILSTOCK SPINDLE ALIGNMENT—HORIZONTAL | Forward at end of Spindle when fully extended 0 to 0.0005 | 17  FACE PLATE RUNOUT | On diameter 0 to 0.0005 on face at normal diameter 0 to 0.001 |
| 4  SPINDLE CENTER RUNOUT | Total Indicator Reading 0 to 0.0004 | 11  TAILSTOCK SPINDLE ALIGNMENT—VERTICAL | High at end of Spindle when fully extended 0 to 0.0005 | 18  WORK MOUNTED IN CHUCK | Must turn round 0.0003 Must turn cylindrical on 12 in. length of workpiece 0.0008 |
| 5  SPINDLE NOSE RUNOUT | Total Indicator Reading 0 to 0.0003 | 12  TAILSTOCK TAPER ALIGNMENT—HORIZONTAL | End of 12 in. Test Bar 0 to ± 0.0005 | 19  WORK MOUNTED IN CENTERS | Must turn cylindrical on a 12 in. length of workpiece 0.0004 |
| 6  CAM ACTION OF SPINDLE | Total Indicator Reading with Indicator on rear side of Test Plate 0 to 0.0003 | 13  TAILSTOCK TAPER ALIGNMENT—VERTICAL | High at end of 12 in. Test Bar 0 to 0.0005 | 20 LEAD SCREW LEAD PER FT. LEAD IN ANY 4″ | ± 0.001 ± 0.0004 |
| 7  SPINDLE TAPER RUNOUT | Total Indicator Reading at end of 12 in. Test Bar 0 to 0.0006 at end of Spindle Nose 0 to 0.0003 | 14  VERTICAL ALIGNMENT OF HEAD AND TAIL CENTERS | High at Tailstock 0 to 0.001 | 21 BACK LASH ON CROSS FEEDS SCREW ON COMPOUND REST SCREW | 0.004 0.004 |

| | 13″ | 15″ | 17″ |
|---|---|---|---|
| Max. profiling dia. at one setting | 5″ | 4½″ | 0-6″, 6″-12″ |
| Max. template dia. | 5″ | 4½″ | 9″ |
| Max. copying length, straight bed lathe | 31″ | 24″ or 32″ | 67″ |
| Max. copying length, gap bed lathe | 27″ | 27″ or 40″ | 44″ or 67″ |
| Max. front angle, undercut | 5° | 5° | 5° |
| Max. back angle | 40° | 40° | 40° |
| Max. stroke when turning 90° shoulders | 3″ | 3″ | 3″ |
| H.P. of pump motor | ½ | ½ | ½ |
| Tank capacity, approximate | 5 gal. | 5 gal. | 7 gal. |
| Swing over bed | 13″ | 15″ | 17″ |
| Swing over gap, gap bed lathe | 18″ | 24″ | 28″ |
| Length of gap in front of face plate | 4½″ | 6″ | 9¼″ |
| Swing over cross slide | 8″ | 8¾″ | 10⅛″ |
| Swing over carriage wings | 12″ | 14″ | 16″ |
| Distance between centers, flush | 24″ or 36″ | 30″ or 48″ | 54″ or 75″ |
| Face plate dia. | 12″ | 14″ | 16″ |
| Follower rest capacity | 2″ | 2½″ | 3″ |
| Hole through headstock spindle | 1⅝″ | 2⅛″ | 3⅛″ |
| Spindle nose A.S. taper key drive | L-0 | L-1 | L-2 |
| Taper in spindle nose bushing | No. 3 MT | No. 3 MT | No. 4 MT |
| Spindle center | No. 3 MT | No. 3 MT | No. 4 MT |
| Spindle bearings, Gamet precision tapered roller bearings | Front — double row; Rear — single row, spring loaded | | |
| Spindle bearing outside diameters | Front, 4″ — Rear, 3⅝″ | Front, 5½″ — Rear, 4⅜″ | Front, 7½″ — Rear, 6″ |
| Bed ways, induction hardened, ground | 2V, 2 Flat | 2V, 2 Flat | 2V, 2 Flat |
| Bed length | 52½″ or 64″ | 65″ or 83″ | 96″ or 120″ |
| Bed width | 8½″ | 10″ | 12⅞″ |
| Tailstock spindle dia. | 1⅜″ | 1½″ | 2″ |
| Tailstock center | No. 3 MT | No. 3 MT | No. 4 MT |
| Tailstock spindle travel | 4¼″ | 6″ | 6¾″ |
| Tailstock spindle graduated | 0″ to 4¼″ by ⅛″ | 0″ to 6″ by ⅛″ | 0″ to 6″ by ⅛″ |
| Carriage length | 13½″ | 17½″ | 20″ |
| Width of carriage bridge | 6″ | 8″ | 8¾″ |
| Width of cross slide | 4″ | 5⅛″ | 6¾″ |
| Width of compound rest | 3½″ | 4½″ | 5½″ |
| Cross slide travel | 6½″ | 7″ | 10½″ |
| Compound rest travel | 3¾″ | 4⅝″ | 6″ |
| Tool post slot | for 9/16″ square tools | for ⅝″ square tools | for ¾″ square tools |
| Speed range, two speed motor | RPM — 39, 65, 78, 88, 129, 144, 177, 204, 288, 334, 408, 457, 667, 750, 915, 1500 | RPM — 30, 58, 60, 82, 115, 120, 153, 163, 229, 241, 307, 319, 457, 600, 637, 1200 | RPM — 28, 42, 55, 65, 84, 94, 130, 135, 187, 202, 270, 311, 405, 450, 622, 900 |
| Motor, two speed | 1½-3 HP, 900-1800 RPM 3ph, 220 *or* 440V, 60C | 2½-5 HP, 900-1800 RPM 3ph, 220 *or* 440V, 60C | 4-8 HP, 900-1800 RPM 3ph, 220 *or* 440V, 60C |
| Number of V-belts | 2 | 3 | 5 |
| Lead screw dia. | 1⅛″ | 1¼″ | 1½″ |
| threads per inch, Acme | 6 | 4 | 4 |
| Feed rod dia. | ¾″ | 1″ | 1¼″ |
| Number of threads | 45 | 45 | 45 |
| Threading range | 4, 4½, 4¾, 5, 5½, 5¾, 6, 6½, 7, 8, 9, 9½, 10, 11, 11½, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, 26, 28, 32, 36, 38, 40, 44, 46, 48, 52, 56, 64, 72, 76, 80, 88, 92, 96, 104, 112 | | |
| Number of feeds | 45 | 45 | 45 |
| Feed range | 0.068″ to 0.0025″ | 0.048″ to 0.0017″ | 0.050″ to 0.0018″ |

Note: Threads 4 thru 7 are obtained by using change gear furnished.



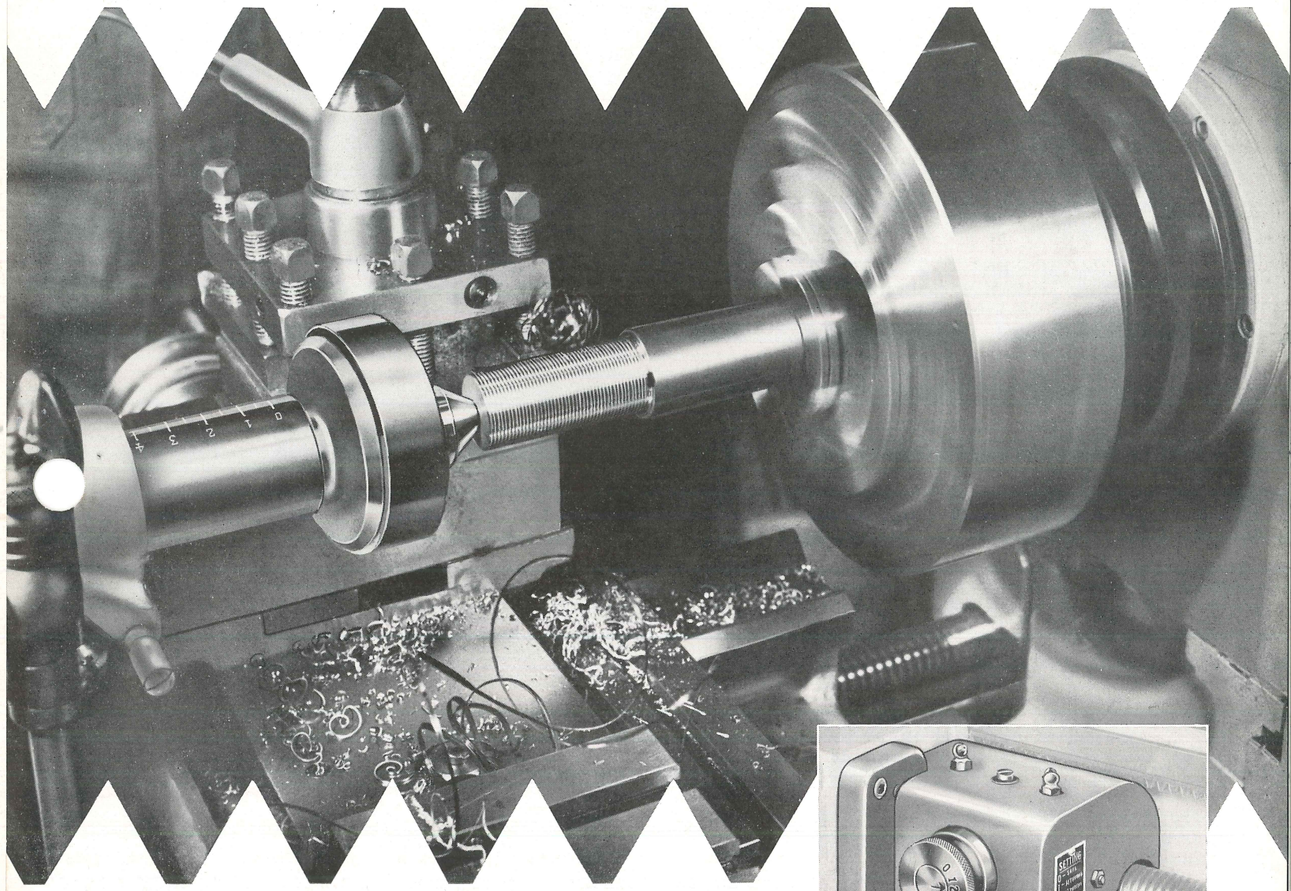
## PROFILING ATTACHMENT

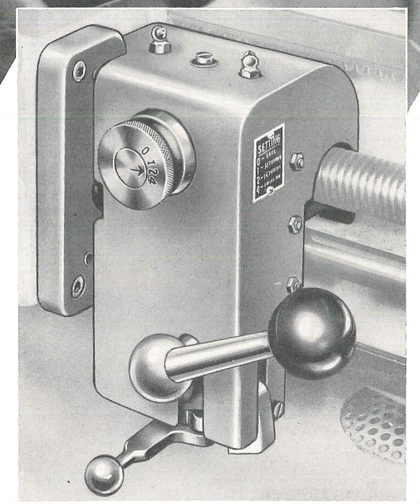
Equips Clausing-Colchester lathes indicated at right for automatic duplication of multiple diameters, 90° shoulders, tapers, bevels, radii, grooves, chamfers and undercuts. Complete with motor and integral pump, reservoir, lines, switch, template centers and support bar. Easily installed — holes for support bar and profiler unit are pre-drilled and tapped. See specifications above.

**No. 13-225** for 13″ x 24″ lathes, serial #32175 and higher, 307 lbs.
**No. 13-226** for 13″ x 36″ lathes, serial #32175 and higher, 307 lbs.
**No. 15-325** for 15″ x 30″ lathes, serial #32687 and higher, 307 lbs.
**No. 15-326** for 15″ x 48″ lathes, serial #32687 and higher, 307 lbs.
**No. 17-525** for 17″ x 54″ lathes, serial #32707 and higher, 588 lbs.
**No. 17-526** for 17″ x 75″ lathes, serial #32707 and higher, 588 lbs.

6520E-1 3601B5

# cut threads FASTER
# EASIER
# MORE ACCURATELY





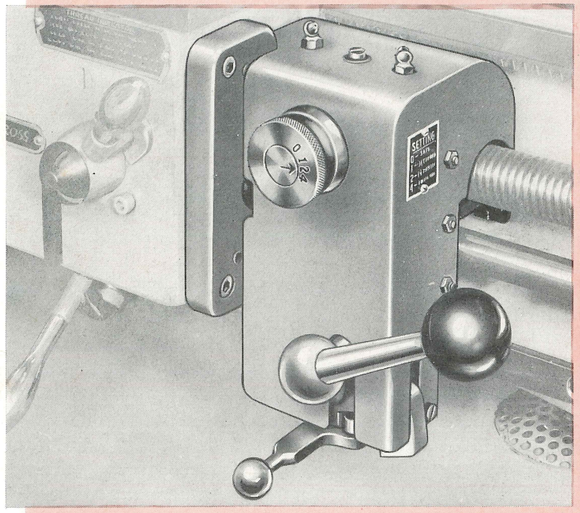
# CLAUSING COLCHESTER 13″ 15″ 17″

## geared head lathes equipped for

## *high speed thread cutting*

CLAUSING DIV., ATLAS PRESS CO., KALAMAZOO, MICHIGAN, U. S. A.

# CLAUSING COLCHESTER Hi-Speed Thread Cutting Unit



A Clausing-Colchester geared-head lathe equipped for high speed thread cutting

- *— cuts threads five times faster than by normal methods*
- *— threads tight to a shoulder at maximum speed*
- *— cuts internal threads without undercutting*
- *— eliminates rejects incurred in thread cutting*
- *— takes full advantage of carbide tools*
- *— does not restrict normal use of the machine.*

Cutting a 1⅛"-16 thread ... *at 1200 RPM* ... is an example of the production obtained with this attachment on a Clausing-Colchester lathe. And you cut precision threads every time!

The Hi-Speed Unit contains its own half-nuts and engagement mechanism that eliminates all danger of a thread's being "picked up" incorrectly. The tool can't run into the work or chuck — an adjustable stop disengages the half-nuts automatically at the end of the thread.

Operation is simple, fool proof. Press the handle, and the half-nuts engage *at the correct point.* Carriage travels to the pre-set stop which disengages the half-nuts. The operator then merely backs out the tool, returns carriage to starting point, feeds the tool, and again presses the starting lever. It's as easy as that. No revolving dials to watch — no manual coordination to require slow speeds.

Work range includes the following right and left hand threads: 4, 4½, 4¾, 5, 5½, 5¾, 6, 6½, 7, 8, 9, 9½, 10, 11, 11½, 12, 13, 14, 16, 18, 19, 20, 22, 23, 24, 26, 28, 32, 36, 38, 40, 44, 46, 48, 52, 56, 64, 72, 76, 80, 88, 92, 96, 104, 112.

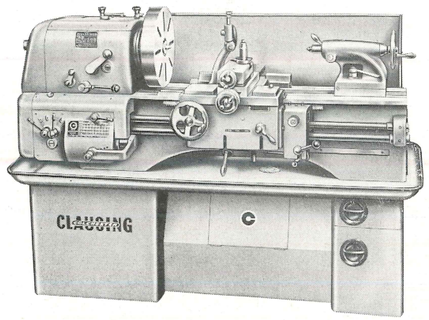
The Hi-Speed Thread Cutting Attachment *must be ordered with lathe from factory* — price includes factory installation.

**No. 13-227** HI-SPEED THREAD CUTTING UNIT for Clausing 13" geared-head lathes.

**No. 15-427** HI-SPEED THREAD CUTTING UNIT for Clausing 15" geared-head lathes.

**No. 17-527** HI-SPEED THREAD CUTTING UNIT for Clausing 17" geared-head lathes.

**SOLD BY**




**15" LATHE WITH HI-SPEED THREAD CUTTING UNIT**

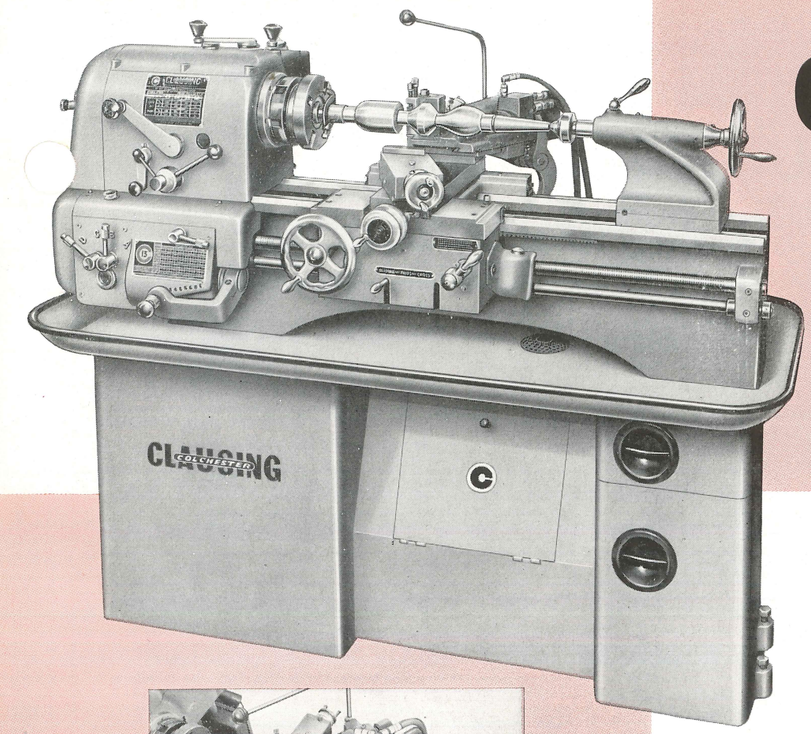
Clausing geared-head lathes are *bigger in capacity.* Have larger spindles, larger thru-hole capacity, larger bearings for heavier work — see chart below. Geared-head is powered thru multiple V-belts.

*Have heavy-duty construction throughout.* Beds are 50% steel, 50% iron with elliptical cross ribbing — ways are induction hardened. Gears in head and quick-change box run in bath of oil — gear shafts are multi-splined. Power feeds are taken from separate feed rod, lead screw is used for thread cutting only.

*Built for precision performance* to American standards of tool room lathe accuracy. Spindle turns on Gamet Micron tapered roller bearings with oil-flow lubrication — the most advanced and accurate bearings known to industry. See catalog for complete construction details.

| Lathe | 17" | 15" | 13" |
|---|---|---|---|
| Hole thru spindle | 3-1/16" | 2-1/16" | 1-9/16" |
| Spindle nose | L-2 | L-1 | L-0 |
| Front spindle bearing, OD | 7-1/2" | 5-1/2" | 4" |
| Rear spindle bearing, OD | 6" | 4-3/8" | 3-9/16" |

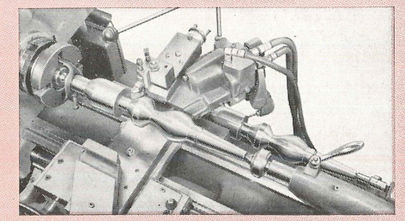
Bulletin 13-227 360185




# CLAUSING COLCHESTER

## 13" 15" 17" hydraulic profiling lathes

**No. 6520 E**



Clausing-Colchester profiling lathes combine the production advantages of automatic duplication with the versatility of a standard geared-head lathe. Multiple diameters, tapers, 90° shoulders, bevels, radii, grooves, chamfers and undercuts are reproduced quickly, and to the same accuracy as the template—saving time, money, and eliminating rejects. Second operation work, such as cutting off, can follow immediately using the front tool post.

Profiler tool slide and hydraulically operated angle slide are mounted on rear of carriage cross slide, with hydraulic slide 60° to axis of lathe bed. Angle slide is powered by an integral hydraulic cylinder, controlled in relation to template by a spool-type valve and adjustable stylus mechanism. Stylus arm pivots on ball bearings for smooth action and lasting accuracy. Support centers for templates are mounted at rear of lathe bed. Motor, pump, and reservoir are integral.

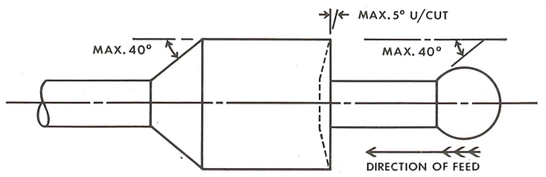
Moving the hydraulic control lever engages tool with work, or withdraws it for standard lathe operations — there's no loss of time shifting from one machining function to another.

Lathe features include: big work capacities with large spindles — see specifications — Gamet Micron tapered roller bearings with oil flow lubrication, tapered key-drive spindle nose, enclosed geared-headstock and quick change box with oil-bath lubrication, hardened bed ways.

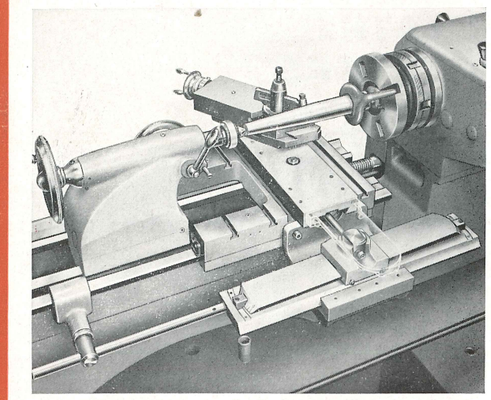
| Number | Swing over Bed | Between Centers | Bed Length | Net Weight | Ship Weight |
|---|---|---|---|---|---|
| **STRAIGHT BED LATHES** | | | | | |
| **6520E** | 13" | 24" | 52½" | 1540 | 2050 |
| **6521E** | 13" | 36" | 64" | 1600 | 2110 |
| **6530E** | 15" | 30" | 65" | 2290 | 2890 |
| **6531E** | 15" | 48" | 83" | 2440 | 3160 |
| **6517E** | 17" | 75" | 120" | 4380 | 5520 |
| **GAP BED LATHES** | | | | | |
| **6522E** | 13" | 24" | 52½" | 1540 | 2050 |
| **6523E** | 13" | 36" | 64" | 1600 | 2110 |
| **6532E** | 15" | 30" | 65" | 2290 | 2890 |
| **6533E** | 15" | 48" | 83" | 2440 | 3160 |
| **6519E** | 17" | 54" | 96" | 4080 | 4980 |
| **6518E** | 17" | 75" | 120" | 4380 | 5520 |

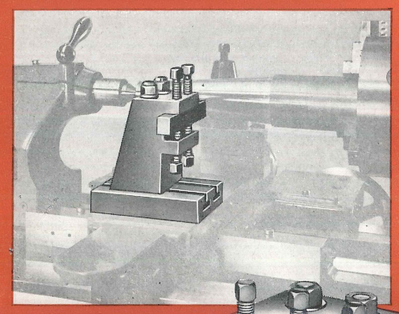
EQUIPMENT FURNISHED: profiling unit with pump, motor and feed lines; base; two-speed motor; electric panel with magnetic starter, reversing switch, limit switch; face plate, driving plate; two centers, reducing sleeve; thread dial indicator; follower rest; change gear; wrenches; instruction and parts list manual.

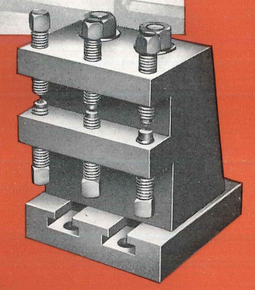
Maximum profiling capacities of Clausing geared-head lathes are indicated below, and on the back of this page.

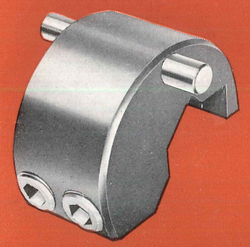


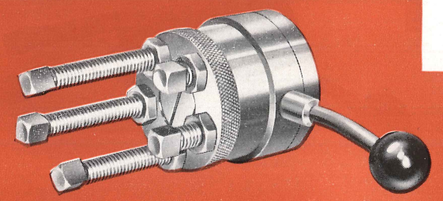

CLAUSING DIV., Atlas Press Company, Kalamazoo, Mich., U.S.A.











# CLAUSING COLCHESTER ACCESSORIES

## TELESCOPIC TAPER ATTACHMENT

The Telescopic Taper Attachment has a telescoping cross feed screw that eliminates the necessity of disengaging the cross feed for taper operations — permits regular hand feed to be used to bring tool to required work diameter. Screw turns on two ball thrust bearings in taper slide. Has two sets of graduations — one in degrees of taper, the other in inches per foot. Range, 10° both sides of center line (20° included angle) and 4″ per foot. When ordered with lathe, taper attachment is installed at factory.

**No. 13-213** TELESCOPIC TAPER ATTACHMENT for 13″ lathes serial No. 32175 and higher. Working stroke, 12″. 44 lbs.

**No. 15-413** TELESCOPIC TAPER ATTACHMENT for 15″ lathes serial No. 32687 and higher. Working stroke, 18″. 85 lbs.

**No. 17-512** TELESCOPIC TAPER ATTACHMENT for 17″ lathes serial No. 32707 and higher. Working stroke, 18″. 99 lbs.

## REAR TOOL POST

Permits additional operation from rear of cross slide. Mounts quickly, easily on cross slide of lathes listed below.

**No. 13-217** REAR TOOL POST for 13″ lathes serial No. 32175 and higher. 15 lbs.

**No. 15-418** REAR TOOL POST for 15″ lathes serial No. 32687 and higher. 40 lbs.

**No. 17-524** REAR TOOL POST for 17″ lathes serial No. 32707 and higher. 50 lbs.

## FIVE-POSITION CARRIAGE STOP

For accurately gauging length of cut — indexing feature plus adjustable screws simplifies repetitive operations. Mounts on lathe carriage. Furnished with One-Position Stop, listed below. Accurate indexing thru lever control is provided by steel balls under spring tension.

**No. 13-216** 5-POSITION CARRIAGE STOP for 13″ lathes serial No. 33162 and higher. 3½ lbs.

**No. 15-416** 5-POSITION CARRIAGE STOP for 15″ lathes serial No. 33192 and higher. 4 lbs.

**No. 17-515** 5-POSITION CARRIAGE STOP for 17″ lathes serial No. 33207 and higher. 5 lbs.

## ONE-POSITION CARRIAGE STOP

For repetitive turning, boring or facing jobs. Clamps on front bed way on either side of carriage. Same as furnished with 5-Position Carriage Stop.

**No. 13-214** ONE-POSITION CARRIAGE STOP for 13″ lathe. 2 lbs.

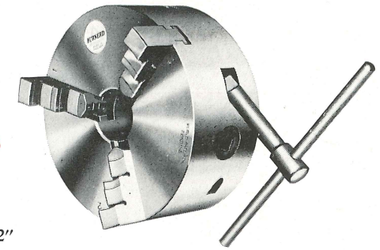
**No. 15-414** ONE-POSITION CARRIAGE STOP for 15″ lathe. 2½ lbs.

**No. 17-514** ONE-POSITION CARRIAGE STOP for 17″ lathe. 3 lbs.

**CLAUSING DIV., Atlas Press Company, Kalamazoo, Michigan, U.S.A.** Bulletin 131L01B10

# CLAUSING COLCHESTER LATHE CHUCKS

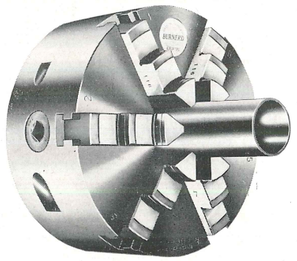
## BURNERD 3-JAW GRIPTRU UNIVERSAL CHUCKS



*Concentricity within .0002" total indicator reading* is the accuracy you can expect and get with Burnerd GRIPTRU chucks. Once the initial work piece is centered to the required tolerance, duplicate parts can be chucked to the same accuracy without further adjustment. GRIPTRU's micro-adjusting mechanism eliminates the need for expensive collets, fixtures ... saves time, ups production ... improves the accuracy of any machine tool, new or old.

Burnerd GRIPTRU chucks are built to retain their accuracy under the toughest conditions. Bodies are Meehanite, scrolls are heat-treated alloy steel forgings — there are three in each GRIPTRU — pinions are case-hardened nickel steel, jaws are case-hardened steel. Furnished with two sets of jaws, one inside, one outside, and wrench. Mount directly on lathe spindle nose.

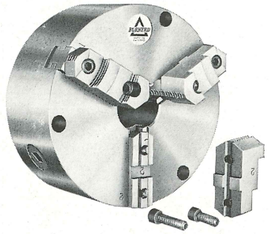
| No. | Size | For Spindle | Jaws | Ship Wt. |
|---|---|---|---|---|
| **131L0** | 6″ | ASA—L-0 | 2 sets, solid | 25¼ |
| **151L0** | 8″ | ASA—L-0 | 2 sets, solid | 58 |
| **151L1** | 8″ | ASA—L-1 | 2 sets, solid | 61 |
| **154L1** | 10½″ | ASA—L-1 | 2 sets, solid | 92 |
| **155L2** | 12″ | ASA—L-2 | 2 sets, solid | 136 |



## BURNERD 6-JAW GRIPTRU UNIVERSAL CHUCKS

Indispensable wherever soft or fragile materials or tubing must be chucked and machined to close tolerances. Chucking work to .0002″ precision takes but one minute ... duplicate parts are chucked to same accuracy at scroll-chuck speed. Furnished with two sets of jaws, one inside, one outside, and wrench. Mount directly on lathe spindle nose.

| No. | Size | For Spindle | Jaws | Ship Wt. |
|---|---|---|---|---|
| **131ZL0** | 6″ | ASA—L-0 | 2 sets, solid | 27¾ |
| **151ZL0** | 8″ | ASA—L-0 | 2 sets, solid | 61 |
| **151ZL1** | 8″ | ASA—L-1 | 2 sets, solid | 64 |
| **154ZL1** | 10½″ | ASA—L-1 | 2 sets, solid | 98 |
| **155ZL2** | 12″ | ASA—L-2 | 2 sets, solid | 142 |



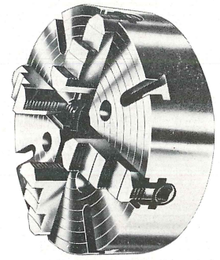
## BURNERD 3-JAW UNIVERSAL CHUCKS

Bodies are high-tensile Meehanite for greater strength and long accurate service. Scrolls are precision-machined heat-treated alloy steel. Pinions are case-hardened nickel steel — there are three in each chuck. Jaws are case-hardened. Bodies, bearing and gripping surfaces of jaws are ground. Mount directly on lathe spindle.

Universal chucks furnished with two sets of jaws have one inside set, one outside set. Those furnished with master jaws have one set of reversible hard tops. Soft blank jaws, and master jaws with soft tops are available — data on request.

| No. | Size | For Spindle | Jaws | Ship Wt. |
|---|---|---|---|---|
| **31L0** | 6″ | ASA—L-0 | 2 sets, solid | 25½ |
| **31L0TJ** | 6″ | ASA—L-0 | Master w/reversible tops | 25½ |
| **52L0** | 7½″ | ASA—L-0 | 2 sets, solid | 34 |
| **52L0TJ** | 7½″ | ASA—L-0 | Master w/reversible tops | 34 |
| **51L0** | 8″ | ASA—L-0 | 2 sets, solid | 47 |
| **51L0TJ** | 8″ | ASA—L-0 | Master w/reversible tops | 47 |
| **51L1** | 8″ | ASA—L-1 | 2 sets, solid | 51 |
| **51L1TJ** | 8″ | ASA—L-1 | Master w/reversible tops | 51 |
| **53L1** | 9″ | ASA—L-1 | 2 sets, solid | 53 |
| **53L1TJ** | 9″ | ASA—L-1 | Master w/reversible tops | 53 |
| **53L2** | 9″ | ASA—L-2 | 2 sets, solid | 66 |
| **53L2TJ** | 9″ | ASA—L-2 | Master w/reversible tops | 66 |
| **54L2** | 10½″ | ASA—L-2 | 2 sets, solid | 94 |
| **54L2TJ** | 10½″ | ASA—L-2 | Master w/reversible tops | 94 |
| **55L2** | 12″ | ASA—L-2 | 2 sets, solid | 136 |
| **55L2TJ** | 12″ | ASA—L-2 | Master w/reversible tops | 136 |

## BURNERD 4-JAW INDEPENDENT CHUCKS



Burnerd heavy-duty independent chucks have rugged Meehanite bodies, large case-hardened ground steel jaws, large-diameter heat-treated operating screws. Mount directly on lathe spindle. Jaws are reversible. Wrench furnished.

| No. | Size | For Spindle | Jaws | Ship Wt. |
|---|---|---|---|---|
| **40L0** | 8″ | ASA—L-0 | 4, reversible | 39 |
| **41L0** | 10″ | ASA—L-0 | 4, reversible | 62 |
| **41L1** | 10″ | ASA—L-1 | 4, reversible | 65 |
| **42L1** | 12″ | ASA—L-1 | 4, reversible | 92 |
| **42L2** | 12″ | ASA—L-2 | 4, reversible | 100 |
| **43L2** | 14″ | ASA—L-2 | 4, reversible | 126 |
| **44L2** | 16″ | ASA—L-2 | 4, reversible | 164 |