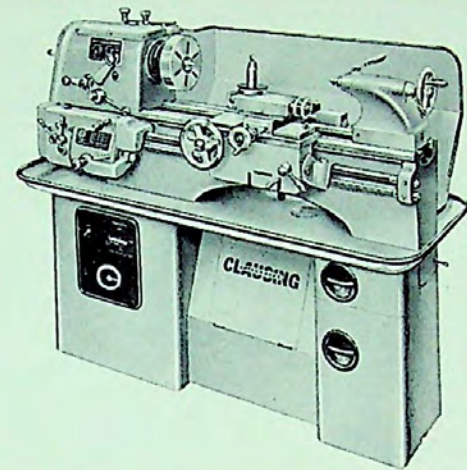


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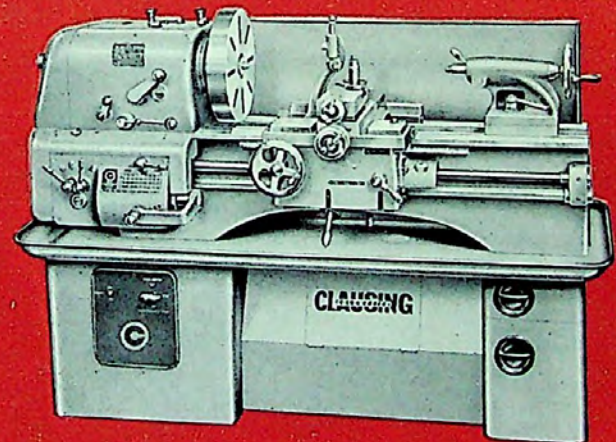
COLCHESTER



13" 15" 17"

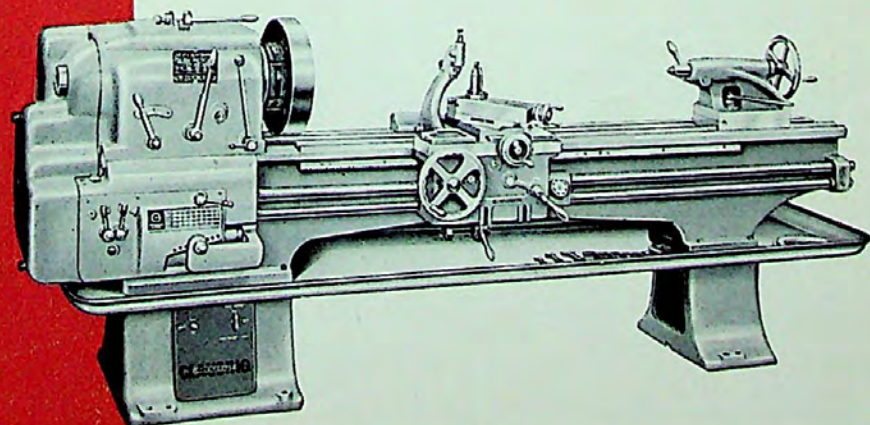


GEARED-HEAD



PRECISION
LATHES

SOLD BY:

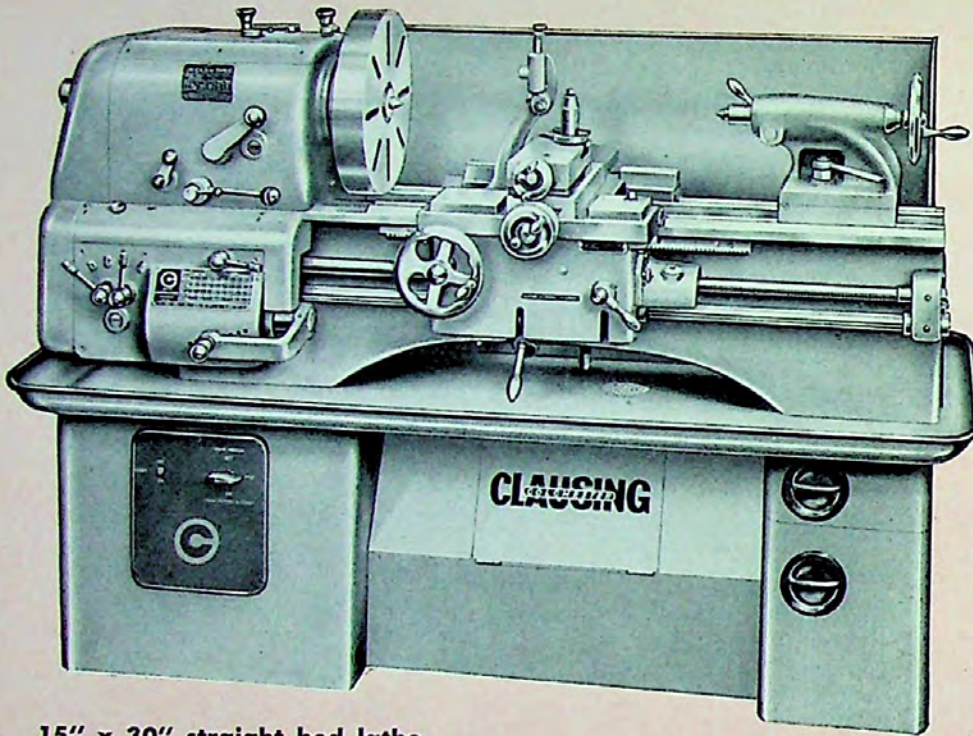


CLAUSING DIV. ATLAS PRESS
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CLAUSING

COLCHESTER

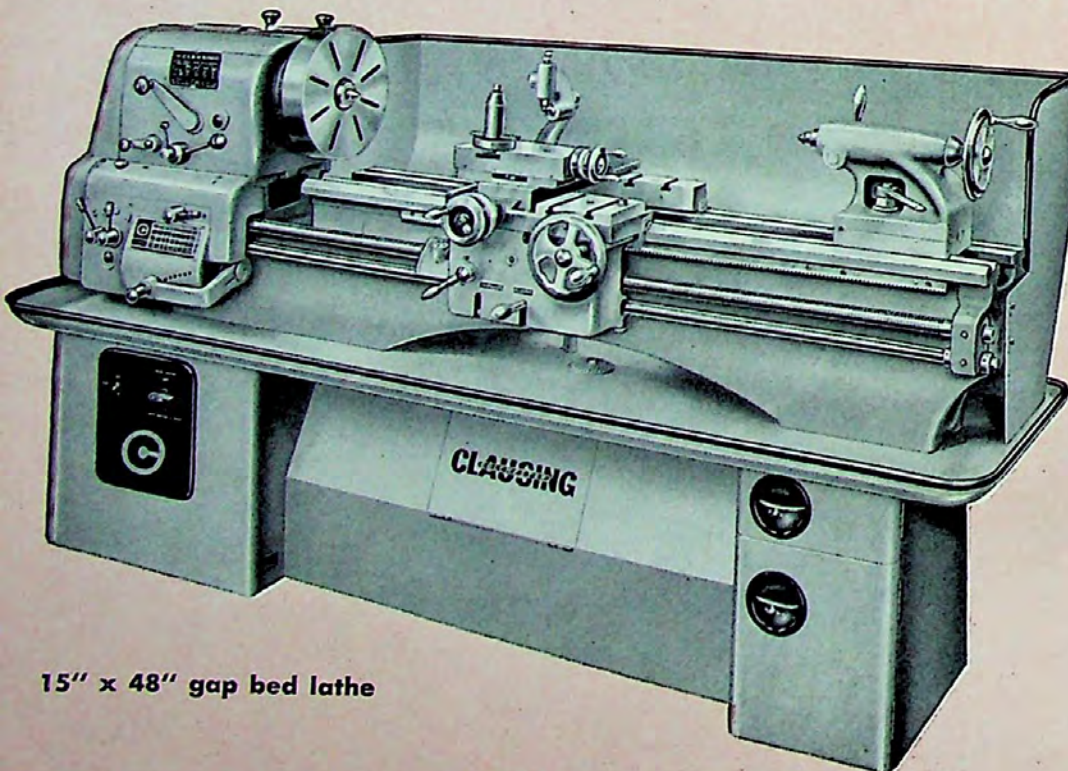
13", 15", 17", heavy duty
geared head precision lathes



15" x 30" straight 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.



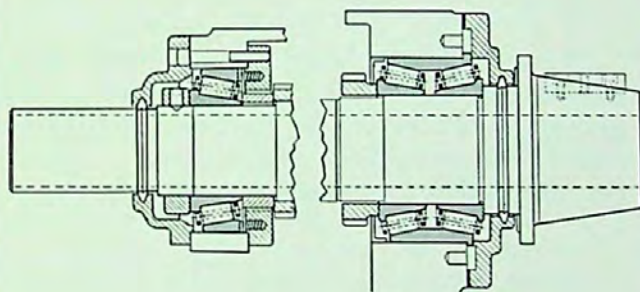
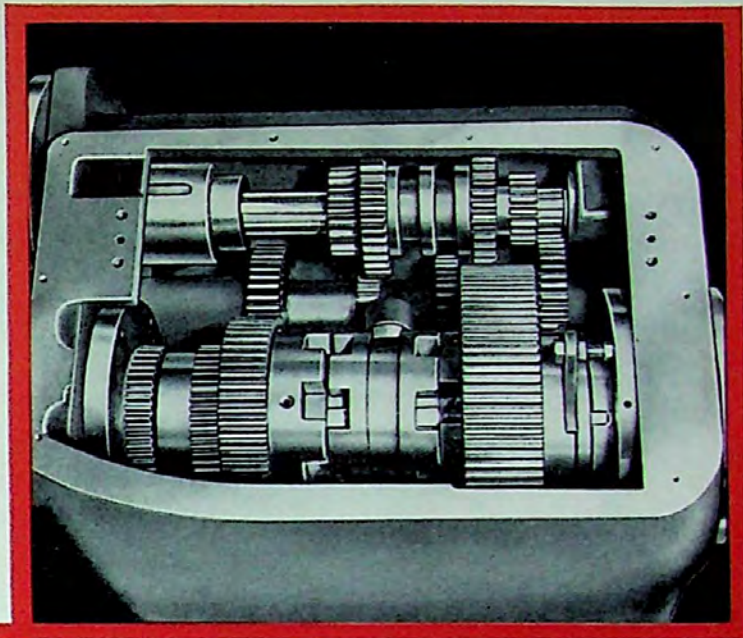
15" x 48" gap bed lathe

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. All gears are shaved, heat-treated high-tensile steel. Gear shafts are multi-splined heat-treated 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.

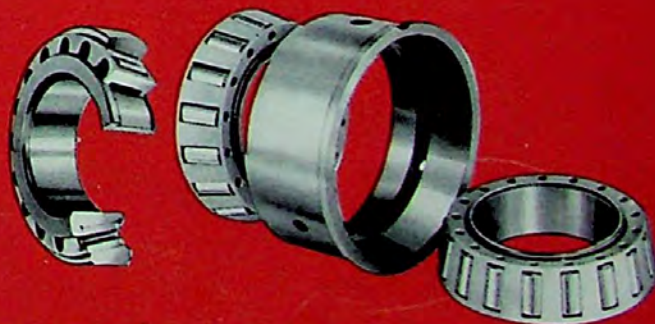


SPINDLE CAPACITIES			
Lathe	17"	15"	13"
Thru-Hole	3-1/16"	2-1/16"	1-9/16"
Nose Taper			
Key Drive	L-2	L-1	L-0

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

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.

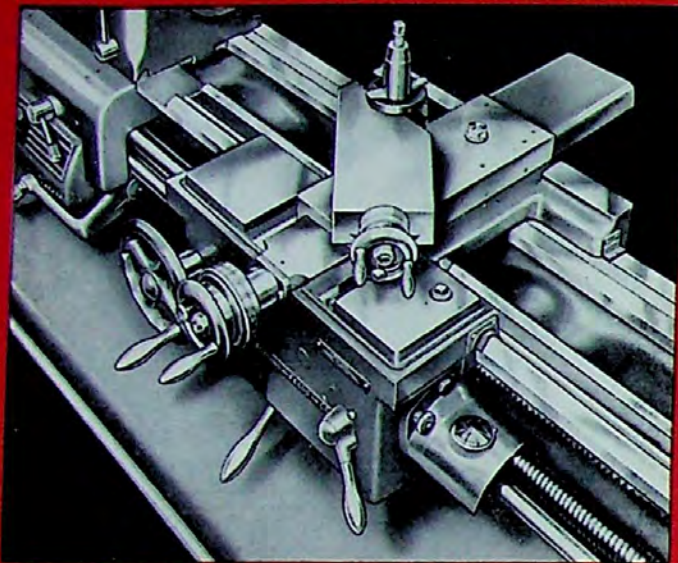


Lathe	17"	15"	13"
Front Spindle Bearing O. D.	7 1/2"	5 1/2"	4"
Rear Spindle Bearing O. D.	6"	4 3/8"	3 9/16"

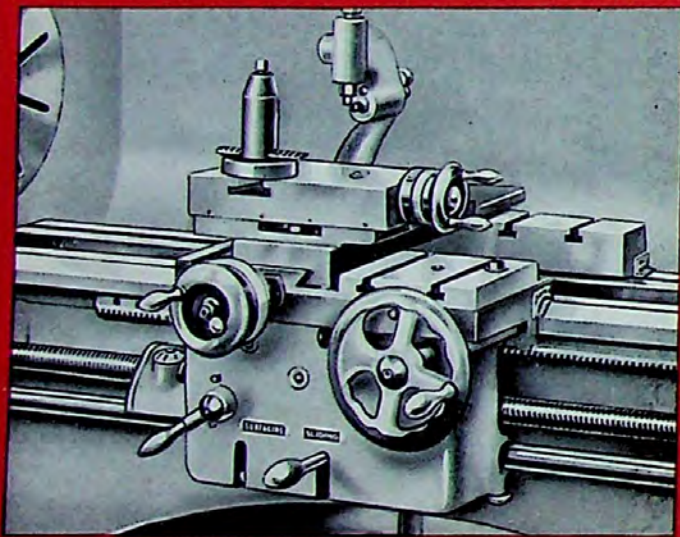
CLAUSING

COLCHESTER

heavy duty, precision lathes

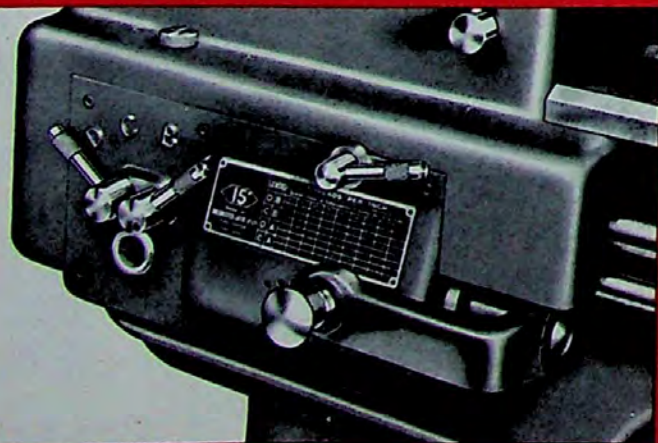


Apron is one-piece, double-walled — all shafts turn in two bearings — gear trains are protected against misalignment and dirt. Carriage has large bearing surfaces on bed, and is secured to bed by heavy plates bearing on front and rear ways. All surfaces of the saddle, cross slide and compound are precision 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.

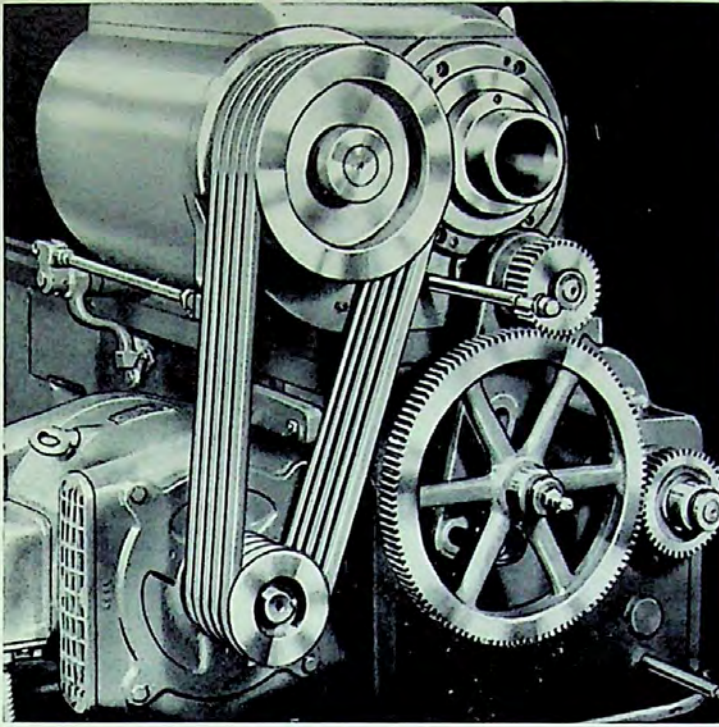


Note, in second illustration at left, the carriage provided with gap-bed lathes. Cross slide position brings cutting tool to outer edge of gap. Has boring-type tee-slotted saddle. Controls on apron are located away from gap, for operator convenience and safety.

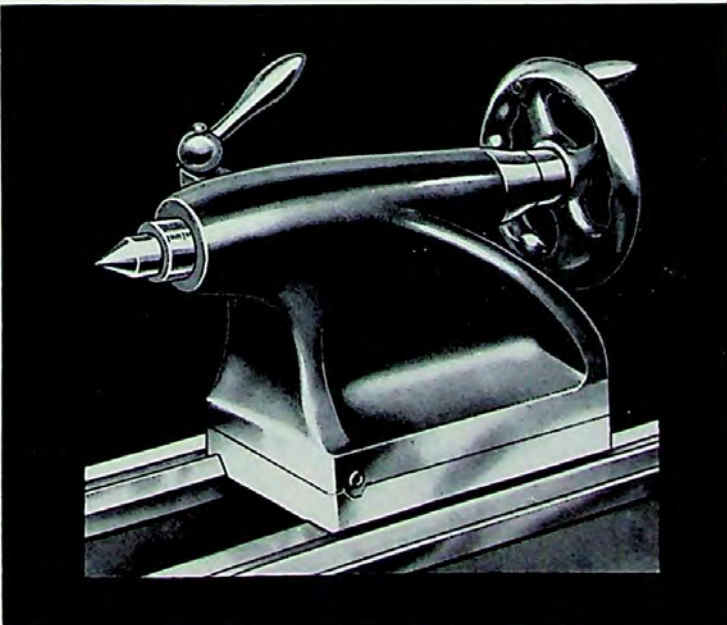
Quick-change mechanism provides instant selection of 36 threads and feeds. Quick-change gear box is cast integrally with the bed for maximum strength. Box is totally enclosed, and mechanism runs in a bath of oil. Gears are shaved, heat-treated high-tensile steel, and are carried on multi-splined heat-treated 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. For safety, feed rod has springball clutch that releases rod whenever the load becomes too great and automatically re-engages when strain is removed. Lead screw is protected by easy-to-replace shear pin in gear train.

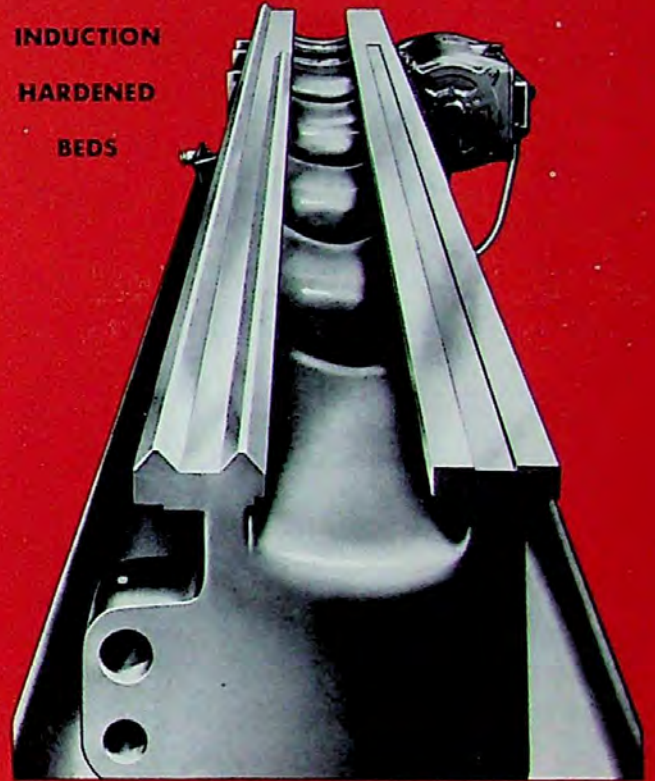


Drive is through multiple V-belts powered by heavy-duty motor furnished with lathe. Note choice of single and two speed motors. Drive is self-contained — motor is mounted at rear of headstock base below chip pan to keep out dirt, chips and coolant. Adjustment for belt tension is provided. V-belts are 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**



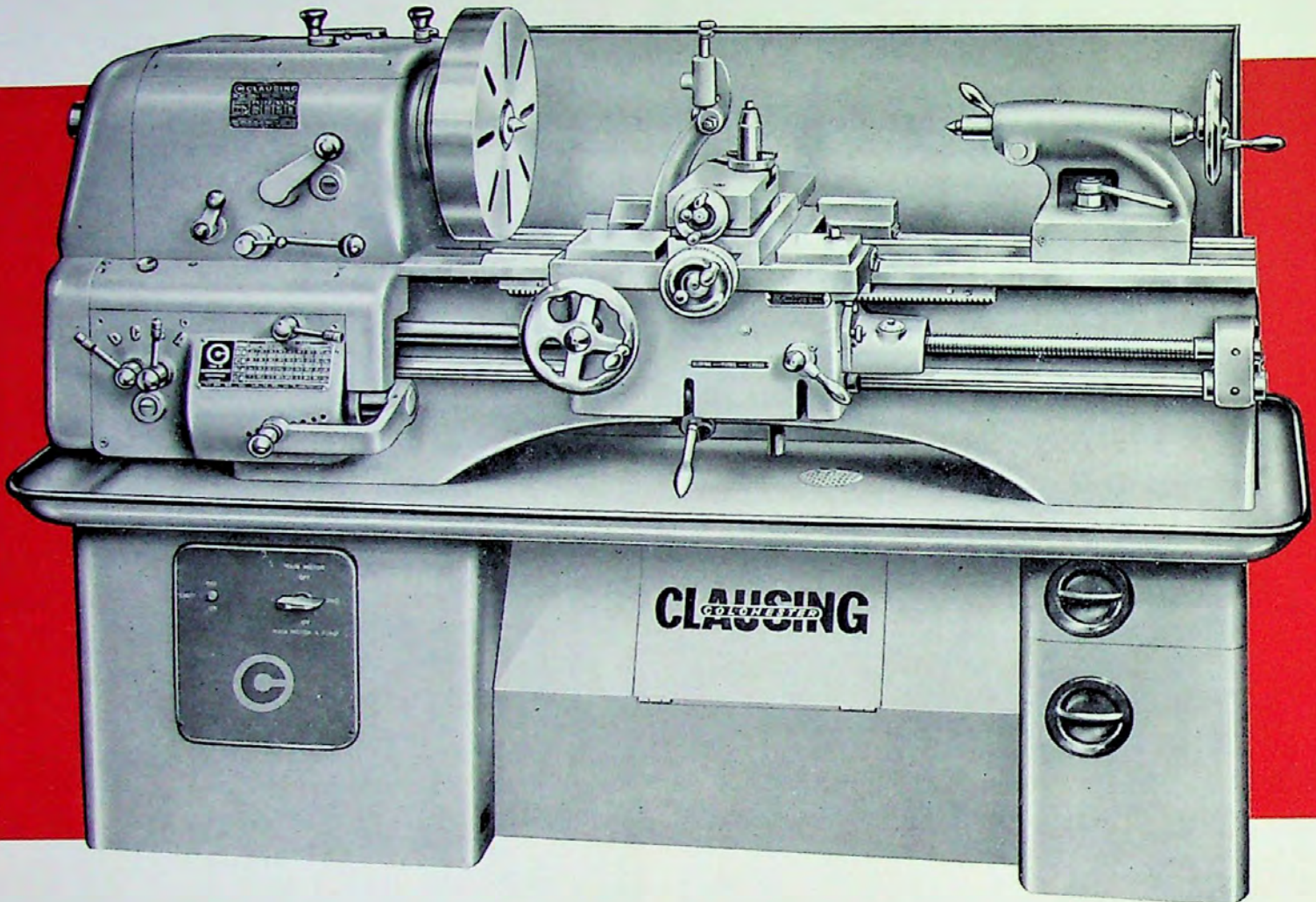
Husky tailstocks have large spindle and screw. Hole for spindle is honed with MicroMatic hones to super-finish standards for accuracy, rigidity, smooth operation. Spindles are graduated, have self-ejecting centers. Tailstock may be set over for taper turning — zero setting line simplifies resetting.

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.

Built-in electric panel with master control switch for magnetic starter.

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.

S P E C I F I C A T I O N S

CAPACITIES AND CLEARANCES

Swing over bed	15"
Swing over cross slide	9"
Swing over carriage wings	14"
Swing over compound rest	3-11/16"
Distance between centers, flush	30" or 48"
Face plate, dia.	14"
Driving plate, dia.	8"
Follower rest, capacity	2 1/2"
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	5 1/2"
Rear	4 3/8"

BED

Ways	2 V, 2 Flat
Length	65" or 83"
Width	10"
Depth at ends	14 7/8"
Depth at center	10"

TAILSTOCK

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

CARRIAGE AND COMPOUND

Carriage length	17 1/2"
Width of carriage bridge	8"
Width of cross slide	5 1/8"
Width of compound rest	4 1/2"
Cross slide travel	9"

Compound rest travel	4 3/4"
Tool post, slot	for 5/8" 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	2 1/2—5 HP, 900-1800 RPM, 3 ph. 220 or 440 V, 60 C
	<i>Specify voltage when ordering.</i>
Number of V-belts	3

THREADS AND FEEDS

Lead screw, dia.	1 1/4"
threads per inch, Acme	4
Feed rod, dia.	1"
Number of threads	36
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
Number of feeds	36
Feed range	0.048" to 0.0033"

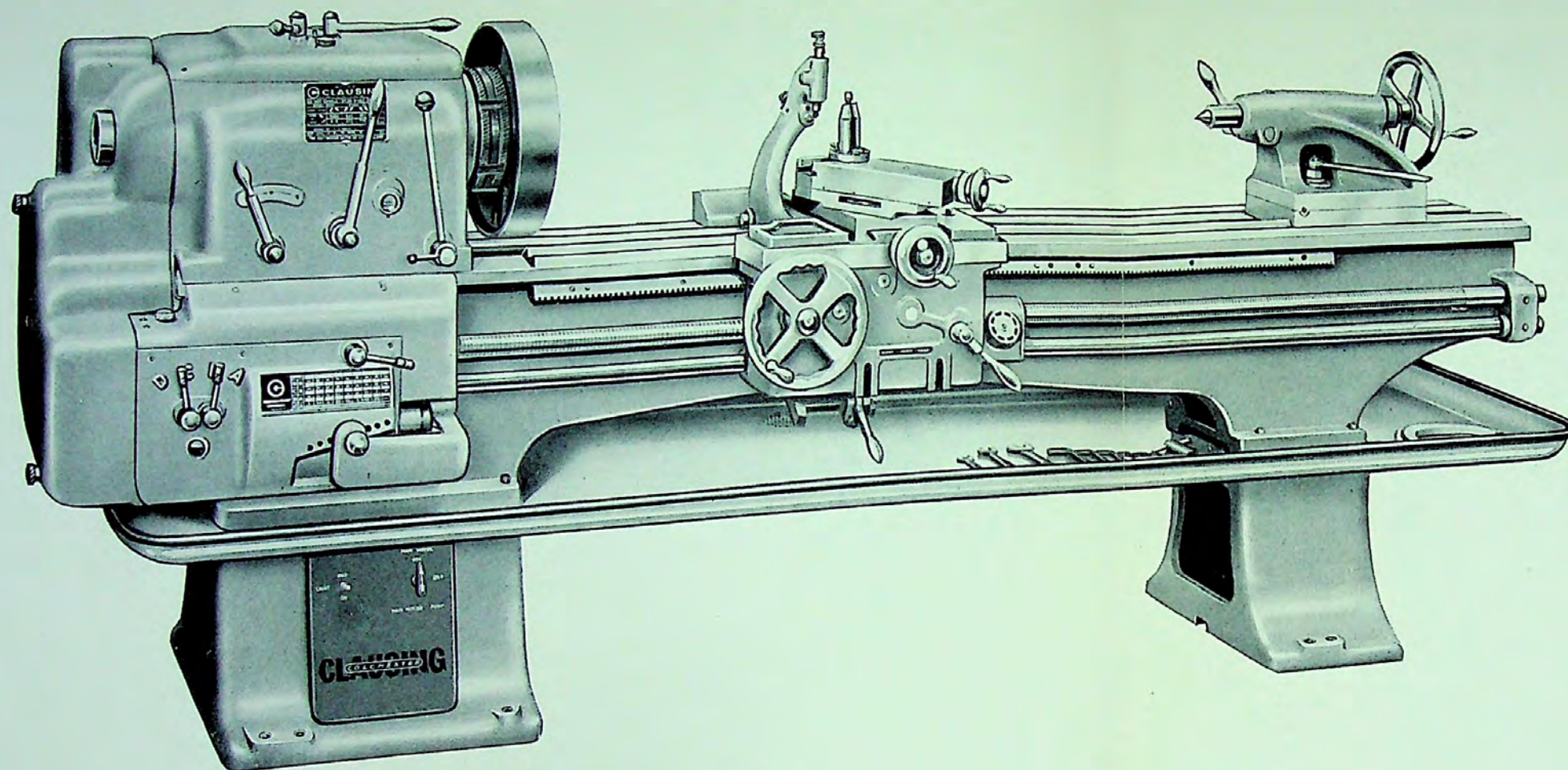
NOTE: Change gear furnished provides additional feed range — 1/2 those shown above.

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.



Catalog Number	Swing Over Bed	Between Centers	Bed Length	Net Weight	Shipping Weight
STRAIGHT BED LATHES					
ONE SPEED MOTOR					
6582	17"	78"	120"	4020 lb.	5160 lb.
TWO SPEED MOTOR					
6542	17"	78"	120"	4020 lb.	5160 lb.
GAP BED LATHES					
ONE SPEED MOTOR					
6594	17"	54"	96"	3720 lb.	4620 lb.
6583	17"	78"	120"	4020 lb.	5160 lb.
TWO SPEED MOTOR					
6554	17"	54"	96"	3720 lb.	4620 lb.
6543	17"	78"	120"	4020 lb.	5160 lb.

EQUIPMENT FURNISHED

- Cast-iron mounting bases with chip and coolant tray.
- One-speed or two-speed motor.
- Built-in electric panel with master control switch for magnetic starter.
- 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 12"
- Swing over carriage wings 16"
- Swing over compound rest 4 1/4"
- Distance between centers, flush 54" or 78"
- 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 11 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 36
- 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
- Number of feeds 36
- Feed range 0.050" to 0.0035"

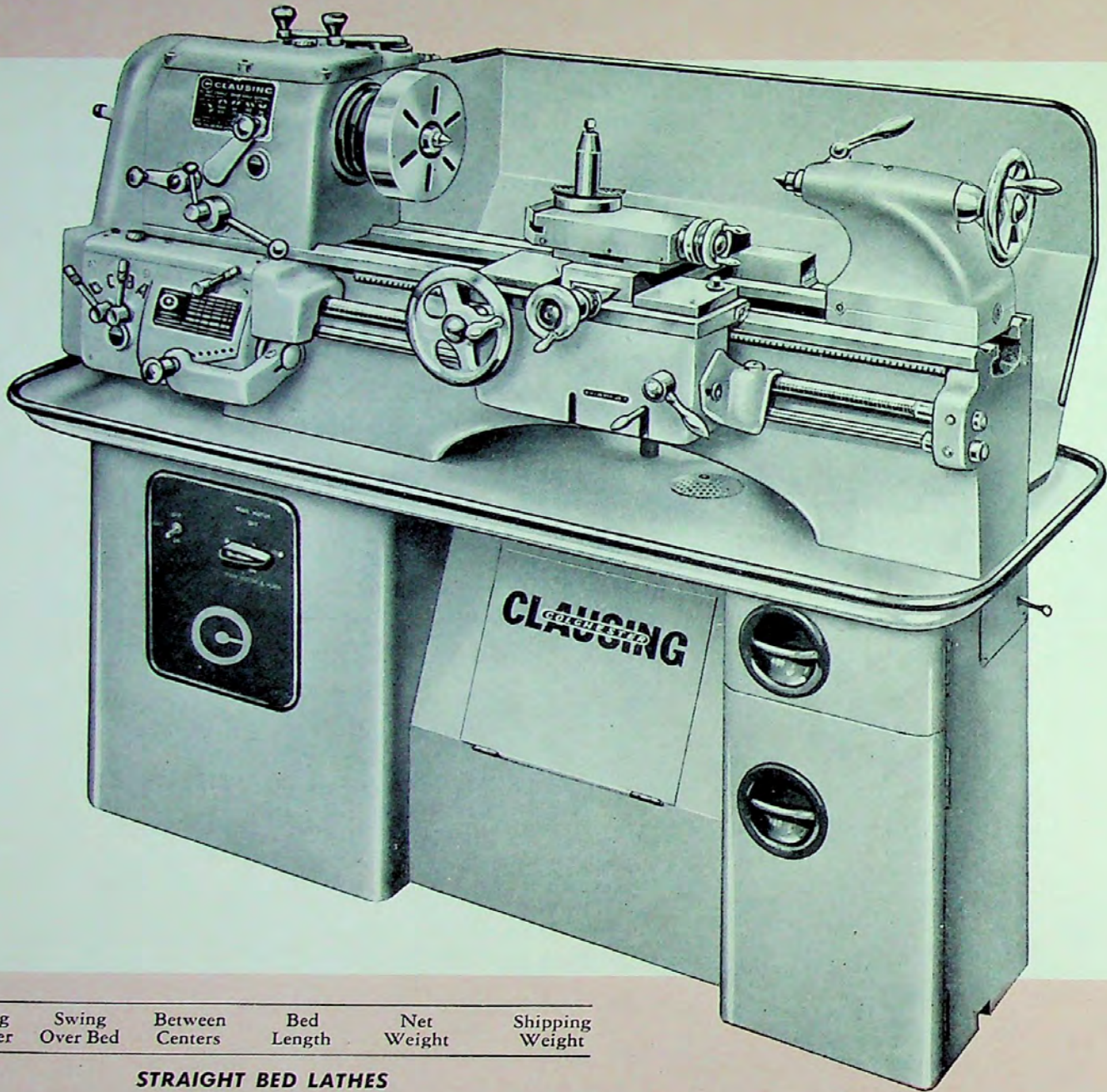
NOTE: Change gear furnished provides additional feed range — 1/2 those shown above.

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.



Catalog Number	Swing Over Bed	Between Centers	Bed Length	Net Weight	Shipping Weight
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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.

Built-in electric panel with master control switch for magnetic starter.

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.

S P E C I F I C A T I O N S

CAPACITIES AND CLEARANCES

Swing over bed	13"
Swing over cross slide	9"
Swing over carriage wings	12"
Swing over compound rest	3 ³ / ₈ "
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	52 ¹ / ₂ " or 64"
Width	8 ¹ / ₂ "
Depth at ends	11 ⁷ / ₈ "
Depth at center	8"

TAILSTOCK

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

CARRIAGE AND COMPOUND

Carriage length	13 ¹ / ₂ "
Width of carriage bridge	6"
Width of cross slide	4"
Width of compound rest	3 ¹ / ₂ "
Cross slide travel	7 ¹ / ₂ "

Compound rest travel	3 ³ / ₄ "
Tool post, slot	for 9/16" square tools

SPINDLE SPEEDS

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

MOTORS

One speed	1 ¹ / ₂ HP, 1720 RPM, 3 ph, 220-440 V, 60 C
Two speed	1 ¹ / ₂ - 3 HP, 900 - 1800 RPM, 3 ph, 220 or 440 V, 60 C
	<i>Specify voltage when ordering.</i>
Number of V-belts	2

THREADS AND FEEDS

Lead screw, dia.	1 ¹ / ₈ "
threads per inch, Acme	6
Feed rod, dia.	3/4"
Number of threads	36
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
Number of feeds	36
Feed range	0.068" to 0.005"

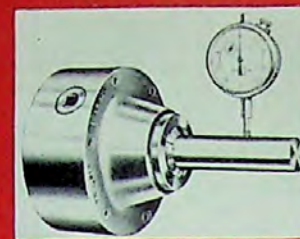
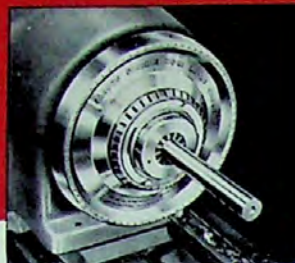
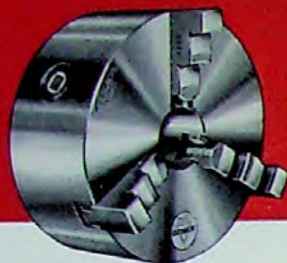
NOTE: Change gear furnished provides additional feed range — 1/2 those shown above.

GAP BED MODELS

Swing in gap	18"
Length of gap in front of face plate	4 ¹ / ₂ "

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

ACCESSORIES



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.

3-JAW UNIVERSAL SCROLL CHUCKS

No. 13-201 7½" UNIVERSAL CHUCK for ASA—L-0 spindle of 13" lathe. Net weight 34 lb. Shipping weight 43 lb.

No. 15-401 9" UNIVERSAL CHUCK for ASA—L-1 spindle of 15" lathe. Net weight 52½ lb. Shipping weight 68 lb.

No. 17-501 12" UNIVERSAL CHUCK for ASA—L-2 spindle of 17" lathe. Net weight 114 lb. Shipping weight 135 lb.

Universal chucks are furnished with two sets of jaws, one inside, one outside. Soft blank jaws, master jaws with hard or soft tops are also available. Data on request.

4-JAW INDEPENDENT CHUCKS

No. 13-202 10" 4-JAW INDEPENDENT CHUCK for ASA—L-0 spindle of 13" lathe. Net weight 62 lb. Shipping weight 77½ lb.

No. 15-402 12" 4-JAW INDEPENDENT CHUCK for ASA—L-1 spindle of 15" lathe. Net weight 92 lb. Shipping weight 111½ lb.

No. 17-502 16" 4-JAW INDEPENDENT CHUCK for ASA—L-2 spindle of 17" lathe. Net weight 164 lb. Shipping weight 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.

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 hand-wheel 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.

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	3/8" - 1/2"	1
7554	1/8" - 1/4"	1	7559	1/4" - 3/8"	1
7555	1/4" - 3/8"	1	7560	3/8" - 1"	1
7556	3/8" - 1/2"	1	7561	1" - 1 1/8"	1
7557	1/2" - 3/4"	1	7562	1 1/8" - 1 1/4"	1
			7563	1 1/4" - 1 1/2"	1

No. 7593 JACOBS HEXAGON COLLETS for Nos. 91-T0 and 91-T1 chucks available in 16ths 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.

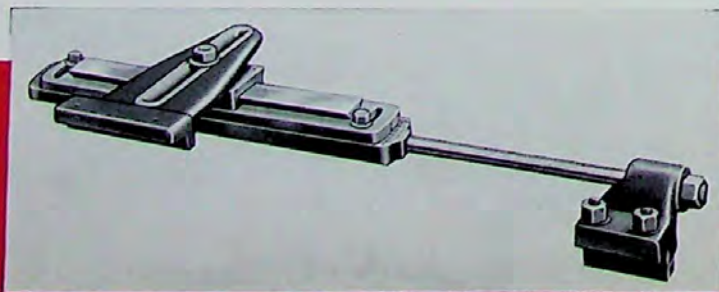
PLAIN TAPER ATTACHMENTS

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.



4-WAY TURRET

Replaces lathe compound, providing a rigid, accurate mount for tools. Turret is a heat treated steel forging. Slide is heavy cast iron, ground on all surfaces. Turret holds four tools or tool holders having a height up to 1". Handle releases turret, swings it to next indexing position, locks it in place. Retracting plunger design keeps mechanism free of dirt, chips. May be ordered separately, or with lathe in place of standard compound, as listed below.

Ordered with Clausing-Colchester lathe in place of standard compound.

- No. 13-204 4-WAY TURRET for 13" lathe. (Extra).
- No. 15-404 4-WAY TURRET for 15" lathe. (Extra).
- No. 17-504 4-WAY TURRET for 17" lathe. (Extra).

Ordered as an accessory for Clausing-Colchester lathe.

- No. 13-205 4-WAY TURRET for 13" lathe. 40 lb.
- No. 15-405 4-WAY TURRET for 15" lathe. 62 lb.
- No. 17-505 4-WAY TURRET for 17" lathe. 90 lb.

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
4 1/2-5	13"	3/4"	4 TOOL—12 POSITION 4 1/2" sq. x 2 1/4" thick	15 lb.
4 1/2-R	.15"	1" or #1 HSS tool holder	4 TOOL—12 POSITION 4 1/2" sq. x 2 3/4" thick	17 lb.
6-5	17"	1 1/4" or #2 HSS tool holder	4 TOOL—12 POSITION 6" sq. x 3 3/8" thick	33 lb.

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.

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.

ENCO Self-Indexing HEX BED TURRETS

Model No.	For Lathe	Hex. Head Dims.		Tool Hole Size		Slide Length	Slide Total Travel	Slide Working Travel
		Across Flats	Face Dims.	Rough Bored	Finish Bore			
E425	13"	5 5/8"	2 7/8" x 3"	Blank	1"	14 1/4"	5 1/4"	4 1/4"
E651	15"	5 5/8"	2 7/8" x 3"	Blank	1"	16 1/2"	7 1/2"	6 1/2"
E650	17"	7"	3 1/2" x 4"	Blank	1 1/4"	16 1/2"	7 1/2"	6 1/2"

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 3 1/2 gallons per minute. Tank capacity, 5 gallons.

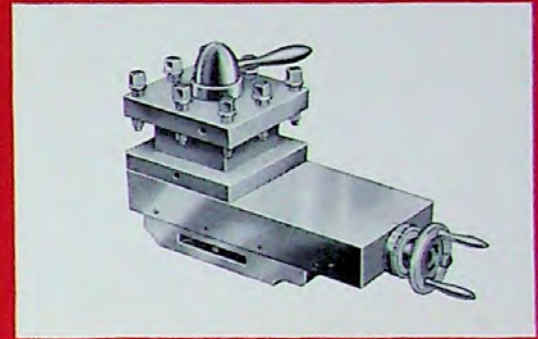
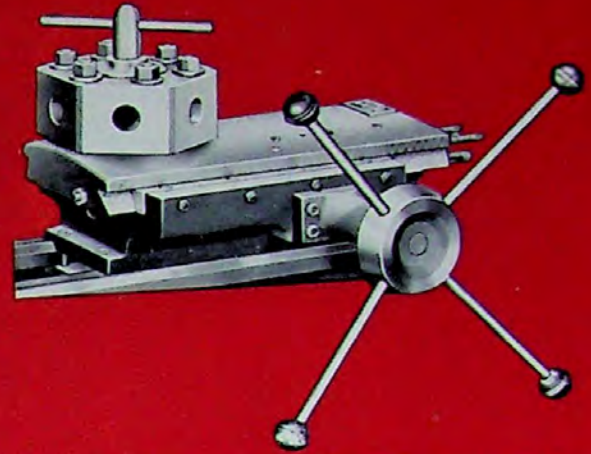
Pump for 13" and 15" lathes mounts in built-in tank in lathe base — both are readily accessible through door in front of lathe. Pump and tank for 17" lathe mount on floor beneath chip pan. Switch mounts in electric control panel. System is installed and wired at factory when ordered with 13" and 15"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

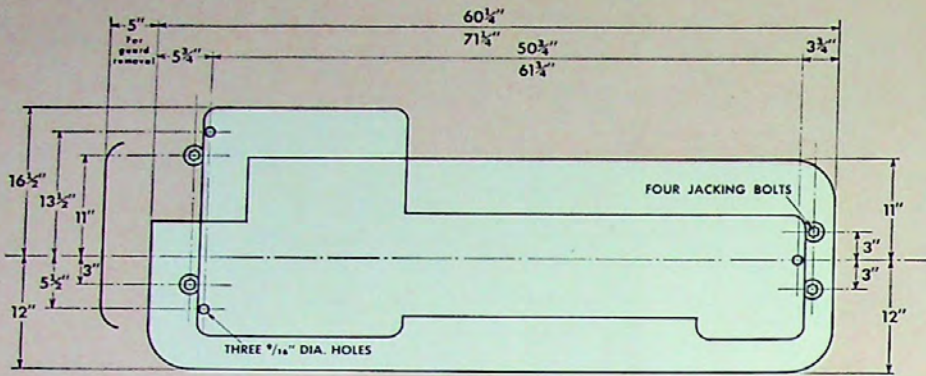
REVERSING SWITCH

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.

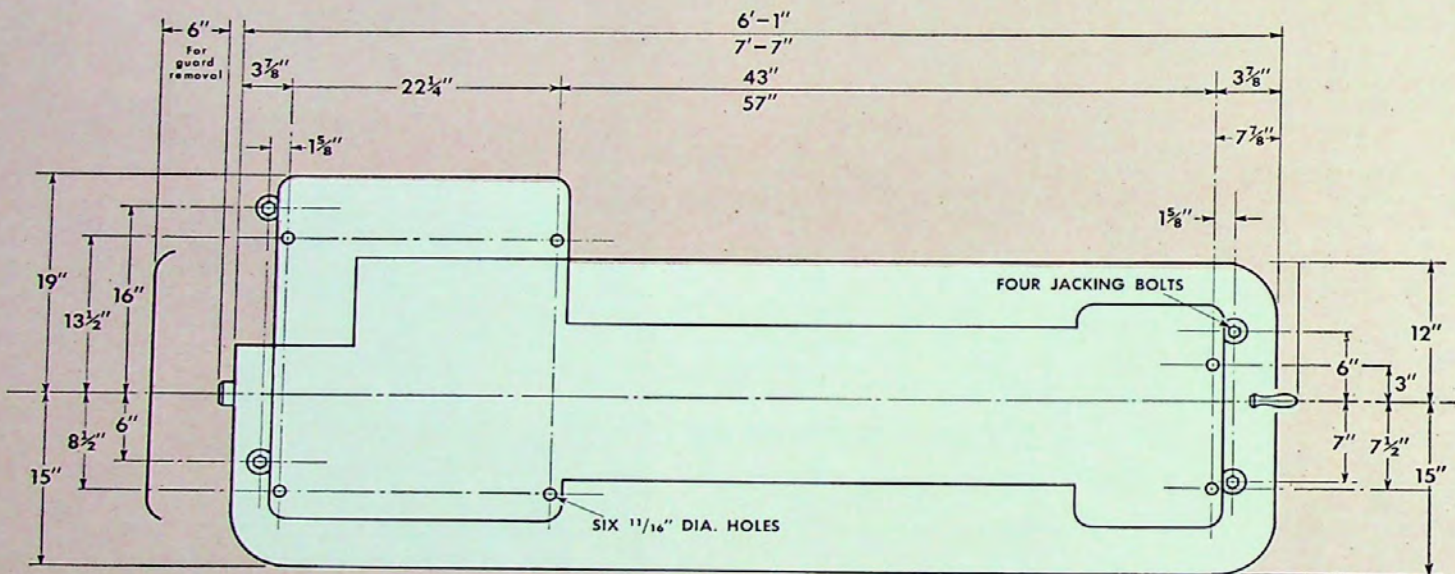
- No. 13-212 REVERSING SWITCH for 13" lathe.
- No. 15-412 REVERSING SWITCH for 15" lathe.
- No. 17-513 REVERSING SWITCH for 17" lathe.



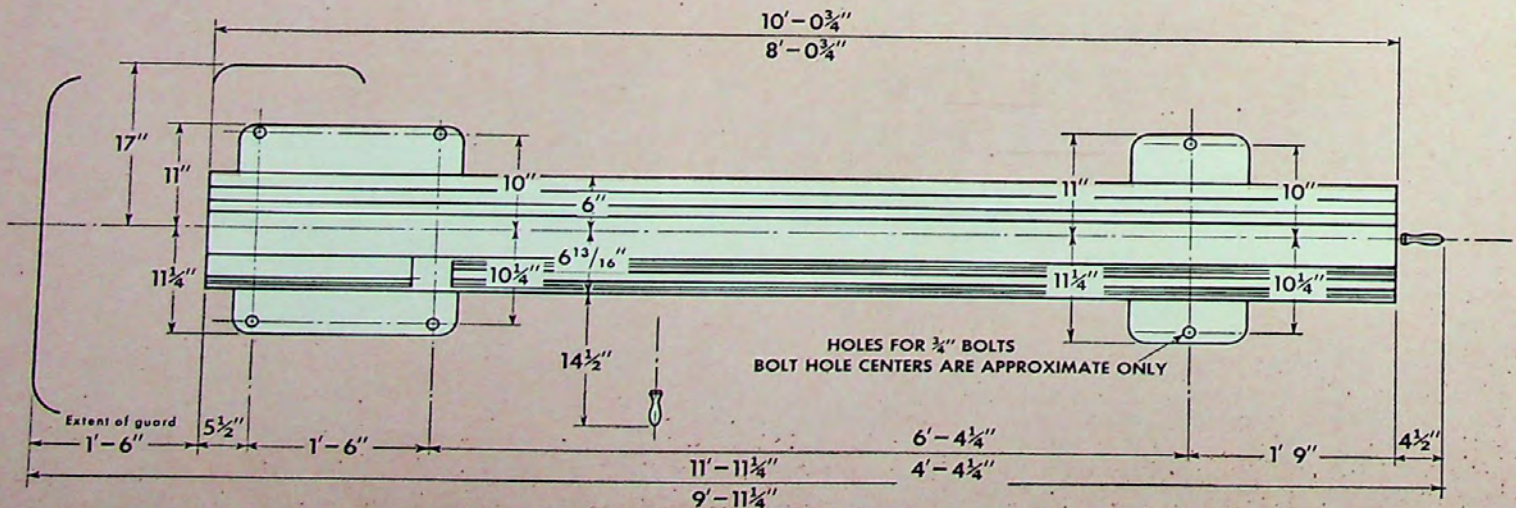
13" LATHES



15" LATHES



17" LATHES

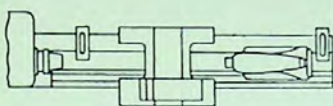
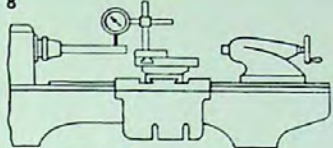
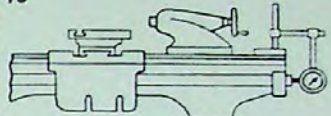
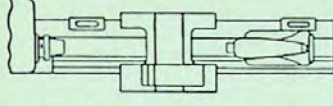
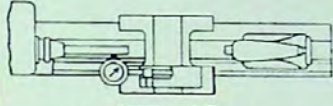
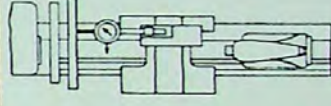
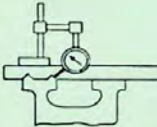
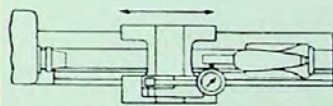
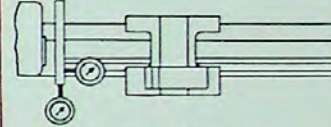
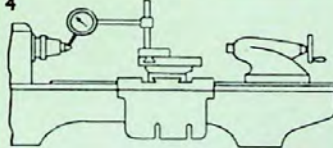
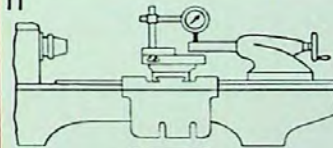
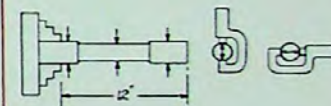
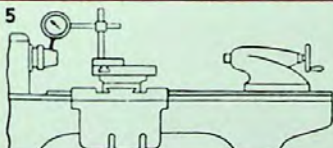
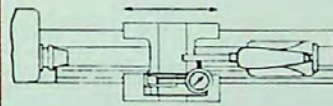
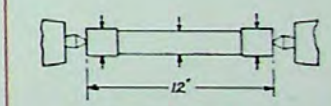
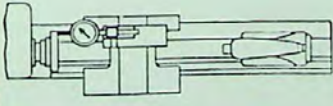
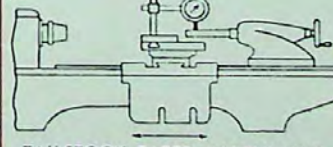
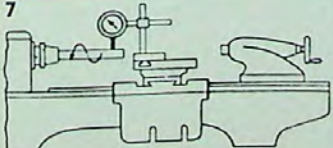
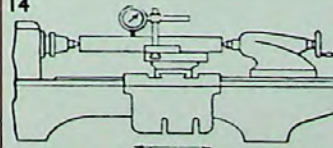


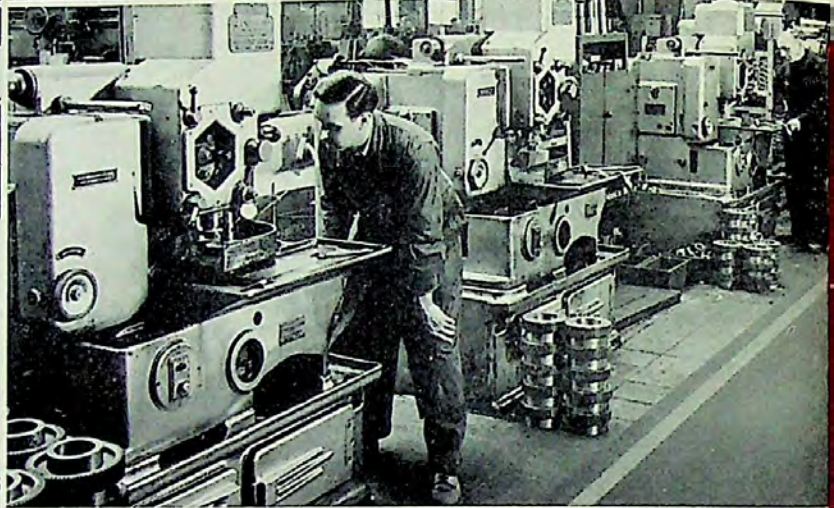
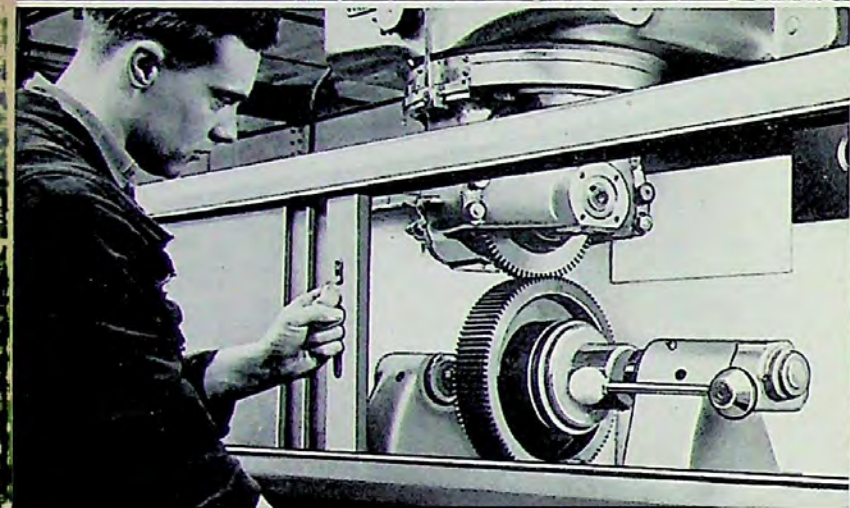
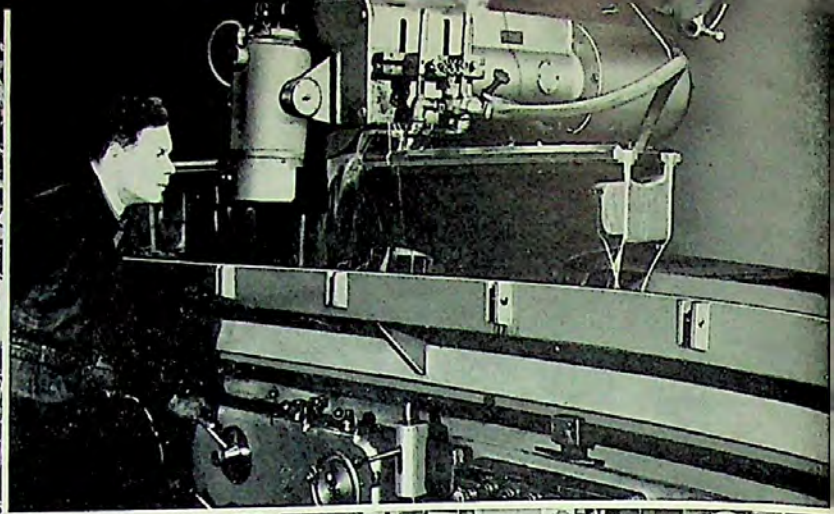
Built to American standards of toolroom lathe accuracy

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 GROSS FEEDS SCREW ON COMPOUND REST SCREW	0.004 0.004



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.

NUMERICAL PRICE LIST FOR

CLAUSING

COLCHESTER

LATHES AND ACCESSORIES

PRICE LIST 6582-2

NOVEMBER, 1956

We reserve the right to make changes in price, design and specifications without notice, and those in effect at date of shipment will apply. Prices marked (*) are F.O.B. factory; all others are F.O.B. nearest port accepting or open to ocean traffic. A minimum billing of \$1.00 will be made on any order.

CLAUSING DIVISION • ATLAS PRESS CO. • KALAMAZOO, MICHIGAN • U.S.A.

Catalog No.	Description	Price
13" STRAIGHT BED LATHES		
WITH ONE SPEED MOTOR		
6564	24" Centers, 52½" Bed	\$1952.00
6565	36" Centers, 64" Bed	2069.00
WITH TWO SPEED MOTOR		
6524	24" Centers, 52½" Bed	2072.00
6525	36" Centers, 64" Bed	2189.00
13" GAP BED LATHES		
WITH ONE SPEED MOTOR		
6566	24" Centers, 52½" Bed	2052.00
6567	36" Centers, 64" Bed	2169.00
WITH TWO SPEED MOTOR		
6526	24" Centers, 52½" Bed	2172.00
6527	36" Centers, 64" Bed	2289.00
15" STRAIGHT BED LATHES		
WITH ONE SPEED MOTOR		
6574	30" Centers, 65" Bed	2744.00
6575	48" Centers, 83" Bed	2919.00
WITH TWO SPEED MOTOR		
6534	30" Centers, 65" Bed	2904.00
6535	48" Centers, 83" Bed	3079.00
15" GAP BED LATHES		
WITH ONE SPEED MOTOR		
6576	30" Centers, 65" Bed	2894.00
6577	48" Centers, 83" Bed	3059.00
WITH TWO SPEED MOTOR		
6536	30" Centers, 65" Bed	3054.00
6537	48" Centers, 83" Bed	3219.00
17" STRAIGHT BED LATHES		
WITH ONE SPEED MOTOR		
6582	78" Centers, 120" Bed	4370.00
WITH TWO SPEED MOTOR		
6542	78" Centers, 120" Bed	4558.00
17" GAP BED LATHES		
WITH ONE SPEED MOTOR		
6594	54" Centers, 96" Bed	4345.00
6583	78" Centers, 120" Bed	4580.00
WITH TWO SPEED MOTOR		
6554	54" Centers, 96" Bed	4533.00
6543	78" Centers, 120" Bed	4768.00

Catalog No.	Description	Price
4½-R	Enco Turret Tool Post for 15" lathe	\$ 77.00*
4½-S	Enco Turret Tool Post for 13" lathe	62.50*
6-S	Enco Turret Tool Post for 17" lathe	125.00*
13-201	7½" Universal Chuck for 13" lathe	110.00
13-202	10" Independent Chuck for 13" lathe	110.00
13-203	18" Face Plate for Gap Bed lathe, ASA—L-0 spindle	46.75
13-204	4-Way Turret for 13" lathe (in place of standard compound)	110.00
13-205	4-Way Turret for 13" lathe (ordered as accessory)	172.00
13-206	Collet Chuck for ASA—L-0 nose, less collet	133.00
13-207	Round Collet for No. 13-206. 1/16" to 1" dia. Specify dia.	9.00
13-208	Coolant System for 13" lathe	118.50
13-209	Taper Attachment for 13" lathe	193.25
13-210	Steady Rest for 13" lathe	37.00
13-212	Reversing Switch for 13" lathe	44.25
13-215	Rotating Center, No. 3 MT, for 13" lathe	25.50
13-218	Back Plate for ASA—L-0 spindle nose	57.75
15-401	9" Universal Chuck for 15" lathe	160.00
15-402	12" Independent Chuck for 15" lathe	166.50
15-403	21" Face Plate for Gap Bed Lathe, ASA—L-1 nose	67.75
15-404	4-Way Turret for 15" lathe (in place of standard compound)	142.00
15-405	4-Way Turret for 15" lathe (ordered as accessory)	229.00
15-406	Collet Chuck for ASA—L-1 spindle nose, less collet	180.00
15-407	Round Collet for No. 15-406. 3/16" to 2" dia. Specify dia.	16.25
15-408	Coolant System for 15" lathe	146.00
15-409	Taper Attachment for 15" lathe	350.00
15-410	Steady Rest for 15" lathe	61.50
15-412	Reversing Switch for 15" lathe	44.25
15-417	Back Plate for ASA—L-1 spindle nose	71.25
15-421	Rotating Center, No. 3 MT, for 15" lathe	25.50
17-501	12" Universal Chuck for 17" lathe	237.00
17-502	16" Independent Chuck for 17" lathe	217.50
17-503	25" Face Plate for Gap Bed Lathe, ASA—L-2 nose	102.00
17-504	4-Way Turret for 17" lathe (in place of standard compound)	149.00
17-505	4-Way Turret for 17" lathe (ordered as accessory)	260.00
17-506	Collet Chuck for ASA—L-2 spindle nose, less collet	186.00
17-507	Round Collet for No. 17-506. 3/16" to 2" dia. Specify dia.	16.25
17-508	Coolant System for 17" lathe	175.00
17-510	Plain Taper Attachment for 17" lathe	395.00
17-511	Steady Rest for 17" lathe	75.25
17-513	Reversing Switch for 17" lathe	44.25
17-516	Rotating Center, No. 4 MT, for 17" lathe	31.50
17-519	Back Plate for ASA—L-2 spindle nose	76.50
91-T1	Jacobs Collet Chuck for 15" lathe	260.00*
91-T0	Jacobs Collet Chuck for 13" lathe	240.00*
E425	Enco Hex Bed Turret for 13" lathes	380.00*
E650	Enco Hex Bed Turret for 17" lathes	545.00*
E651	Enco Hex Bed Turret for 15" lathes	465.00*
7553	Jacobs Round Collet 1/16"—1/8"	13.75*
7554	Jacobs Round Collet 1/8"—1/4"	13.75*
7555	Jacobs Round Collet 1/4"—3/8"	13.75*
7556	Jacobs Round Collet 3/8"—1/2"	13.75*
7557	Jacobs Round Collet 1/2"—5/8"	13.75*
7558	Jacobs Round Collet 5/8"—3/4"	13.75*
7559	Jacobs Round Collet 3/4"—7/8"	13.75*
7560	Jacobs Round Collet 7/8"—1"	13.75*
7561	Jacobs Round Collet 1"—1 1/8"	13.75*
7562	Jacobs Round Collet 1 1/8"—1 1/4"	13.75*
7563	Jacobs Round Collet 1 1/4"—1 3/8"	13.75*
7593	Jacobs Hexagon Collets for Nos. 91-T0, 91-T1 chucks. Specify diameter	15.00*
7594	Jacobs Square Collets for Nos. 91-T0, 91-T1 chucks. Specify diameter	15.00*

Soft Blank Jaws for Universal Scroll Chucks:

13-219	Soft Blank Jaws for No. 13-201, 7½" dia.	per set	\$ 19.50
15-422	Soft Blank Jaws for No. 15-401, 9" dia.	per set	24.50
17-520	Soft Blank Jaws for No. 17-501, 12" dia.	per set	30.50

Master Jaws for Universal Scroll Chucks:

13-220	Master Jaws for No. 13-201 chuck	per set	28.75
15-423	Master Jaws for No. 15-401 chuck	per set	36.75
17-521	Master Jaws for No. 17-501 chuck	per set	48.75

Hard Top Jaws for master jaws:

13-221	Hard Top Jaws for No. 13-201	per set	22.00
15-424	Hard Top Jaws for No. 15-401	per set	27.00
17-522	Hard Top Jaws for No. 17-501	per set	37.00

Soft Top Jaws for master jaws:

13-222	Soft Top Jaws for No. 13-201	per set	16.50
15-425	Soft Top Jaws for No. 15-401	per set	18.75
17-523	Soft Top Jaws for No. 17-501	per set	24.50

