



MASCOT
COLCHESTER

8½" ALL-GEARED HEAD LATHE

WITH 'GAMET' MICRON-PRECISION TAPER ROLLER BEARING SPINDLE—THE MOST ADVANCED AND ACCURATE BEARING WITH OIL-FLOW CONTROL KNOWN TO INDUSTRY

THE COLCHESTER LATHE CO. LTD. COLCHESTER, ENG

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CANADA: THE COLCHESTER MACHINERY CORPORATION LTD.

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WESTERN GERMANY: COLCHESTER WERKZEUGMASCHINEN, G.m.b.H.
STUTTGART/BAD CANNSTATT, SICHELSTR. 19.

SPECIFICATION FOR 8½" 'MASCOT' & 17" SWING 'DOMINION' MODELS

	English	Metric
Height of centres	8½"	215 mm.
Turning diameter		
Over bed	17"	430 mm.
Over carriage	12"	300 mm.
Distance between centres 8 ft. bed ...	4'-6"	1370 mm.
10 ft. bed ...	6'-6"	2000 mm.
Diameter of faceplate	16"	405 mm.
Gap Bed Model		
Swing-in gap	29"	735 mm.
Width in front of faceplate ...	9¼"	235 mm.
Width of bed	12⅞"	325 mm.
Spindle bore	3 1/16"	78 mm.
Taper in spindle nose bush	No. 4 Morse	
Spindle nose	American Taper L.2	
Number of spindle speeds	8	
Range of spindle speeds	{ 37—600 r.p.m. 25—410 r.p.m.	
Diameter of headstock pulley	7¾" dia. x 5-½" Vee Belts	
Feeds		
No. of sliding feeds	45	45
Range of sliding feeds per rev. of spindle	0-0015"—0-050"	0-038mm.—1-25mm.
No. of surfacing feeds	45	45
Range of surfacing feeds per rev. of spindle	0-0007"—0-025"	0-019mm.—0-625mm.
Threads		
No. of Whitworth pitches	45	
Range of Whitworth pitches	4—120 T.P.I.	
No. of Metric pitches	12	
Range of Metric pitches	0-25 mm. to 6 mm.	
Total travel of bottom slide	9¾"	247.5 mm.
Total travel of top slide	6"	152 mm.
Travel of tailstock barrel	6½"	165 mm.
Taper in tailstock barrel	No. 4 Morse Taper	
Overall length 8 ft. bed ...	9'-11¼"	3030 mm.
10 ft. bed ...	11'-11¼"	3640 mm.
Overall width	31½"	800 mm.
Weights		
Motor drive 8 ft. bed	N { 33½ cwt.	1696 kgms.
Motor drive 10 ft. bed	E { 35 cwt.	1771 kgms.
Single pulley drive 8 ft. bed	T { 32½ cwt.	1646 kgms.
Single pulley drive 10 ft. bed	T { 34 cwt.	1722 kgms.
Motor	7½ H.P. 50 cycles	

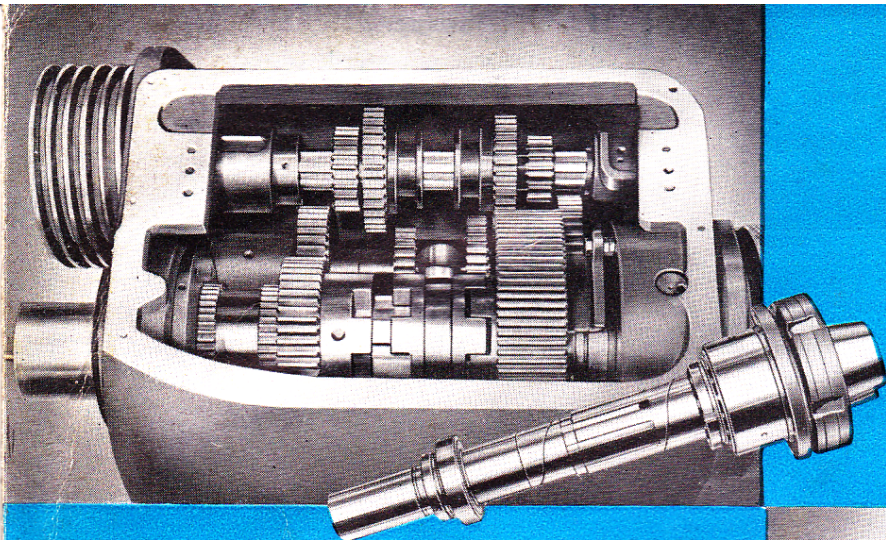
EXTRA EQUIPMENT AVAILABLE

Recommended Sizes of Chucks

12" dia. BURNERD or PRATT 3-jaw geared scroll direct on spindle mounting chuck. (No backplate required). CODE No. 501
16" dia. BURNERD or PRATT 4-jaw independent direct on spindle mounting chuck. (No backplate required). CODE No. 502
Other sizes on application.
25" dia. faceplate for gap bed lathes only. CODE No. 503
4-way automatic indexing turret in place of standard toolholder and slides. CODE No. 504
4-way automatic indexing turret with top and middle slides in addition to standard toolholder and slides. CODE No. 505
Key operated spindle nose type collet attachment, capacity ⅜"-2" dia. CODE No. 506
Round, square or hexagonal collets. CODE No. 507
Electric coolant pump, tank and fittings. CODE No. 508
Belt driven coolant pump, tank and fittings for lineshaft drive machines. CODE No. 509
Taper turning attachment, capacity up to 10" in each direction. Length of taper in one setting 18". CODE No. 510
3 point stationary steady, capacity 6" dia. CODE No. 511
50 volt, 48 watt in-built low volt machine lighting equipment for operation on a supply of 220/440/550 volts, 50 or 60 cycles A.C. CODE No. 512
Finger tip electrical reversing switch in headstock (A.C. supply only). CODE No. 513
Special mechanical clutch for fitting to headstock after lathe has left works. CODE No. 514
Mechanical clutch for incorporation into headstock whilst lathe is under construction. CODE No. 515
Gamet super precision rotating centres. CODE No. 516
Induction hardened bedways. CODE No. 517
A.C. single phase or D.C. electric. CODE No. 518
Backplate machined to suit spindle nose for fitting to customer's own chucks. CODE No. 519
Additional change wheels for special thread pitches. CODE No. 520
Chromium plated control levers and handwheels. CODE No. 521
Special single or two-tone colour finish to customer's requirements. CODE No. 522
Bedway wipers. CODE No. 523
Two speed electric motor for standard 3-phase supply giving 16 spindle speeds 29—900 r.p.m. CODE No. 524
1½" capacity Burnerd "Multisize" collet chuck. CODE No. 526
Flexible round bore collets for "Multisize" chuck, each having ⅜" capacity, in steps from ⅜" to 1½". CODE No. 527
Hydraulic copying attachment with 60° slide for use with 3-phase A.C. supply only. CODE No. 528
Hydraulic copying attachment: (for use with special electrical supply other than above). CODE No. 529
Rear toolpost. CODE No. 530
5 position turret type bed stop. CODE No. 531
Single type bed stop. CODE No. 532
High speed threading unit in-built into lathe whilst under construction. CODE No. 534

	Code Words	
Motor driven 8' gap bed	MAMMOTH	8
" " 10' gap bed	"	10
" " 10' Dominion straight bed ...	DOLLAR	
Single pulley drive 8' gap bed	BUFFALO	8
" " " 10' gap bed	"	10

STANDARD EQUIPMENT INCLUDES :—Triangular plate type toolholder, 16" dia. faceplate, driving plate, 2-No. 4 Morse taper centres, centre bush, thread indicator, travelling steady, chip and water tray. If motor driven lathe, electrical equipment for standard A.C. 3-phase supply with safety type in-built control panel incorporating isolating switch for motor, no volt, and overload releases, and position for pump and lighting switch, set of spanners and keys, spare parts and operators' manual.



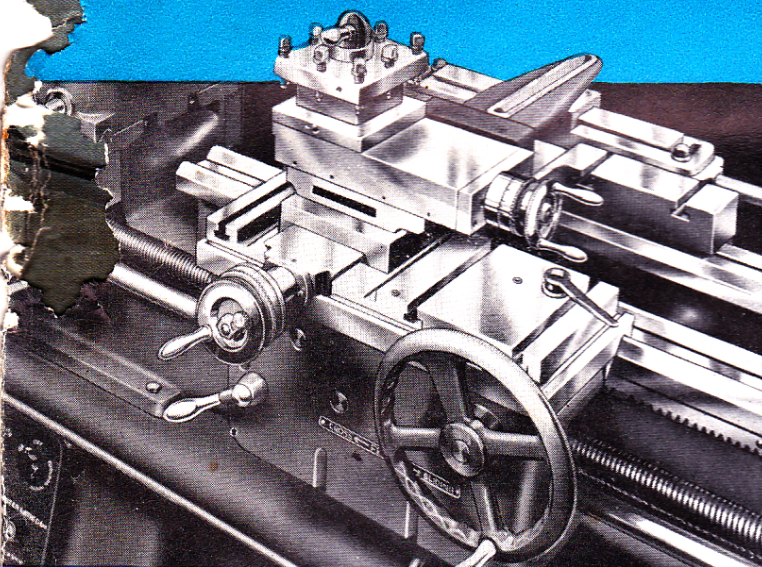
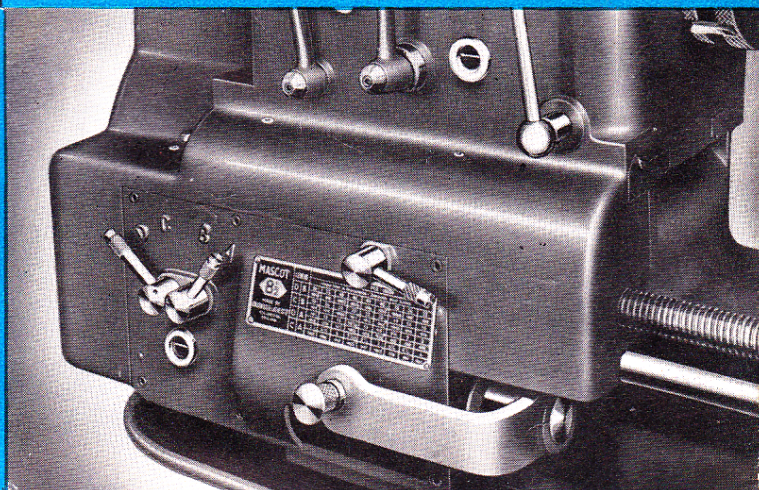
THE HEADSTOCK WITH 'GAMET' MICRON PRECISION TAPER ROLLER BEARING SPINDLE

The oil-bath headstock gives 8 spindle speeds, from 37 to 600 r.p.m. through high tensile precision shaved gears, mounted on multi-spline shafts. Sturdy high tensile steel forged spindle, bored $3\frac{1}{16}$ " dia. is carried on GAMET MICRON precision taper roller bearings . . . the most advanced and accurate bearings with oil-flow control known to industry. American pattern spindle nose: long taper key drive type to L2 standard.

THE QUICK CHANGE FEED BOX

Oil-bath feed box gives 45 feeds from 20 to 666 c.p.i., 45 English threads from 4 to 120 t.p.i., and 12 metric pitches from 0.25 to 6 mm... all immediately available, without the necessity of changing loose gears. Powerful slipping clutch incorporated in feed shaft eliminates any possibility of damage to gears.

N.B.—DOMINION type lathe has special gear box, omitting metric pitches but including $1\frac{1}{2}$ and 23 t.p.i.



THE SADDLE & APRON

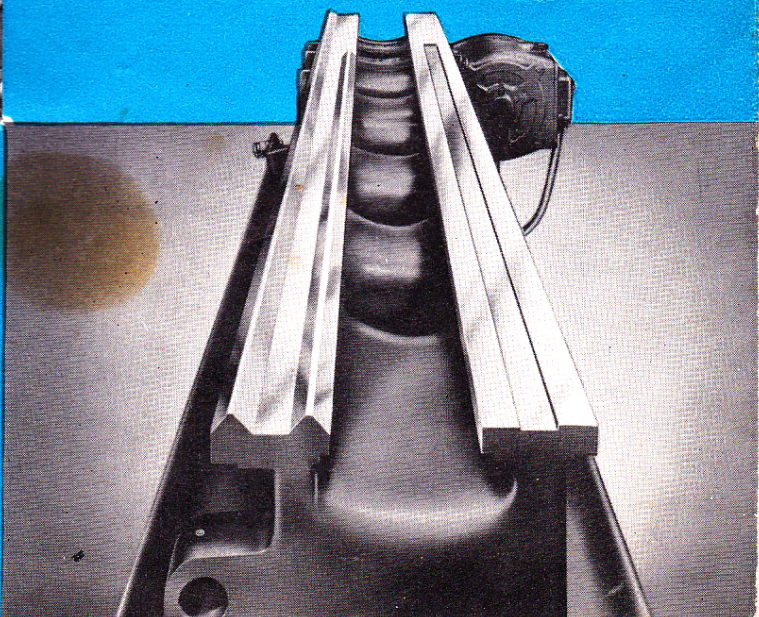
Gap bed models have boring type tee-slotted saddle for work clamping, etc. Slides precision ground with traverse screws having micrometer dials graduated in 0.001 in. Metric dials supplied without extra charge if required.

The double-wall apron, with all shafts supported on two bearings, has foolproof, interlocking controls. Separate feed shaft enables leadscrew to be used exclusively for screwcutting.

Thread cutting dial fitted as standard.

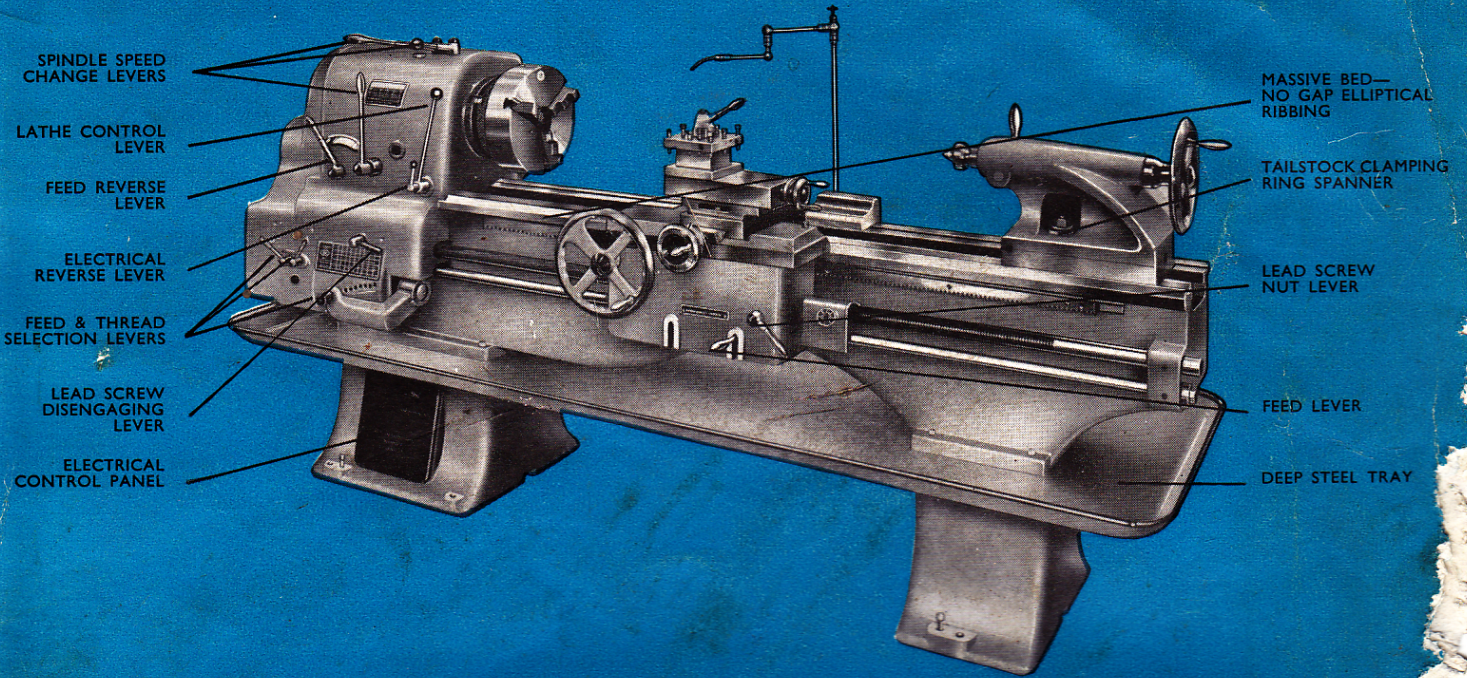
THE BED

Heavy duty, naturally seasoned inverted vee-type, with separate flat and vee slides for saddle and tailstock. Elliptical cross ribbing gives maximum strength and rigidity under the heaviest cutting stresses. All bedways are precision ground, and can be induction hardened if required at small extra cost.



MASCOT
COLCHESTER

17" SWING 'DOMINION' STRAIGHT BED, HEAVY DUTY LATHE



DISTRIBUTORS FOR
CHANNEL ISLANDS

MASCOT

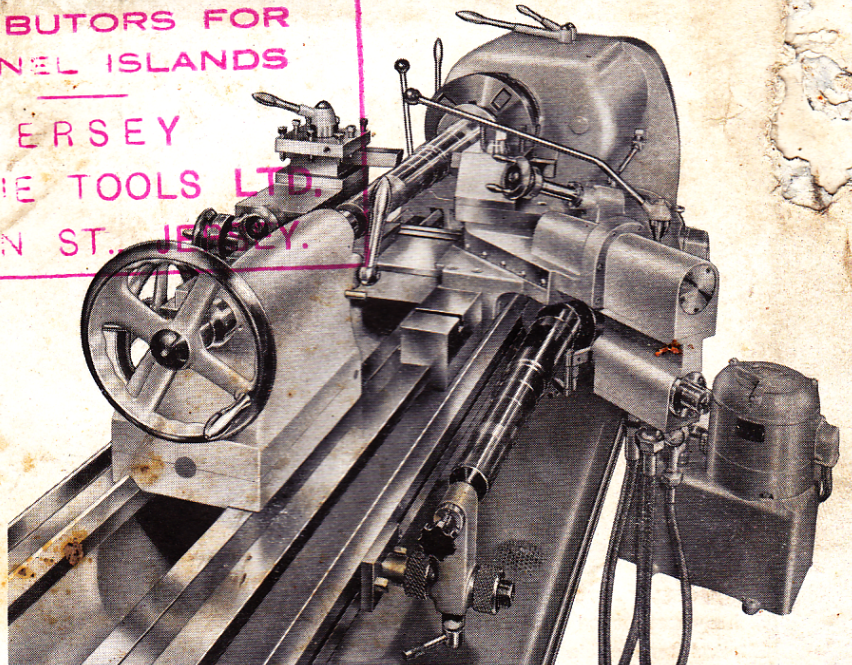
HIGH SPEED COPY TURNING LATHE

With its built-in hydraulic copying unit the MASCOT offers all the advantages of high speed repetition turning, plus the usual precision centre lathe features.

In addition to its wide application for repetition turning, the MASCOT shows tremendous advantages on high speed screwcutting, the stylus being merely set to run out at the required length of thread.

BRIEF SPECIFICATION

Maximum profiling diameter at one setting	0"—6" or 6"—12"
Stroke of toolslide at 60°	4"
Maximum stroke when turning 90° shoulders	3"
Maximum copy turning length, 8' bed	3' 9"
Maximum copy turning length, 10' bed	5' 9"
Spindle speeds	62-1000 r.p.m.
Main motor	7½ h.p.



AVAILABLE FROM ALL LEADING MACHINE TOOL MERCHANTS

Rugged in Metal Removal —with Toolroom Accuracy

The 8½" Mascot and 17" Swing Dominion type lathes are produced in Europe's largest factory solely devoted to the manufacture of precision lathes. The application of modern automobile production techniques coupled with a highly specialised plant and unique system of jigs, fixtures and gauging, enables us to produce on a very large scale a range of lathes which are acknowledged the world over to be the finest value for money and the most accurate in their sphere. The production methods employed ensure complete interchangeability of components and this coupled with a comprehensive—by return—spare parts service, ensures that should that unfortunate accident take place, your machine will be back in service within 24 hours without the specialised fitting and mating up of parts normally associated with machine tools of this accuracy.

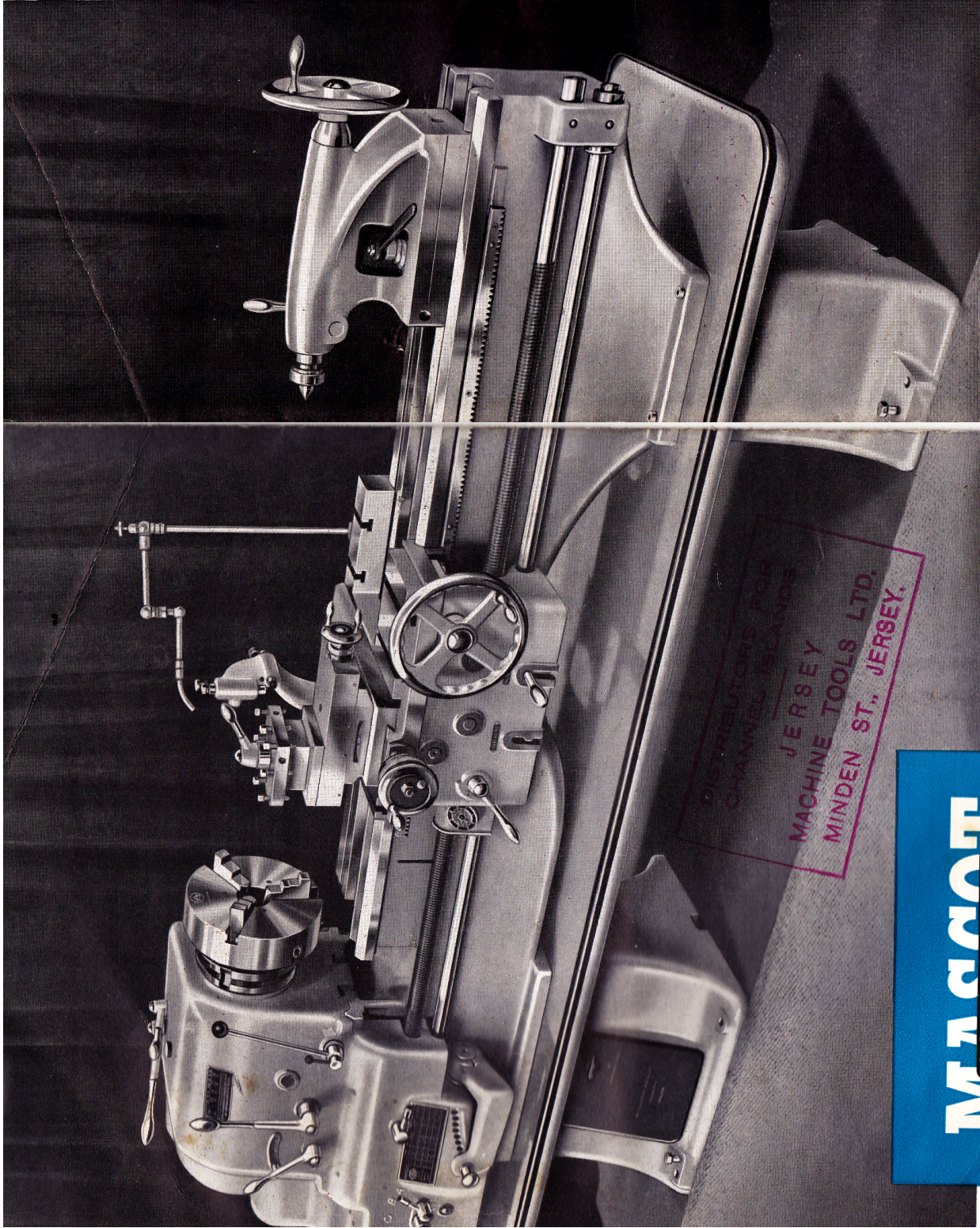
The headstock incorporates an extremely accurate spindle carried on Gamet Micron precision taper roller bearings which are produced under standards room conditions. These, together with a spindle and headstock machined to previously unheard of commercial tolerances, combine to produce accuracy never before found in machine tools other than the finest and most expensive jig boring type of machine. Heat treated and precision shaved headstock gears are carried on high tensile splined shafts—no loose or sliding keys are used on the machines thus enabling superb standards of accuracy and surface finish to be maintained. Saddle and slides are accurately mounted on a heavy duty naturally seasoned elliptically ribbed bed having precision ground ways to ensure maximum rigidity under the heaviest cutting stresses which can be imposed.

The double wall apron with all shafts supported on two bearings has foolproof interlocking controls, and the separate feed shaft enables the leadscrew to be used exclusively for screwcutting thereby ensuring constant accuracy. The feed box is a totally enclosed oil-bath and provides a wide range of both Whitworth and Metric pitches without the necessity of loose change gears.

The heavy duty tailstock is provided with positive pad bolt locking and means of off setting. The bore is honed to a high degree of finish and accuracy to provide long life.

The Mascot Lathe is also available with in-built Hydraulic Profiling equipment, and is the perfect solution to the manufacturer who is faced with small or medium batches of repetition work. Specification of this machine is given on page 6 of the leaflet.

It will pay you to ask for details of the full range of Colchester Lathes—designed and manufactured by lathe specialists in the most modern lathe factory in the world.



MASCOT

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8½" HEAVY DUTY LATHE

✱ A product of large scale 'FLO-LINE' production

built to American toolroom limits of accuracy