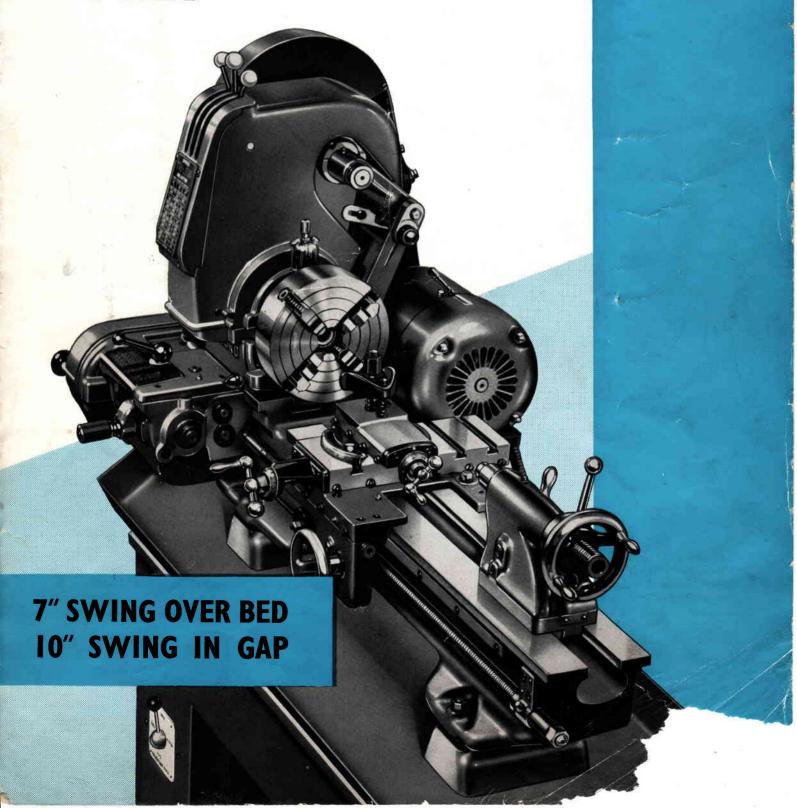
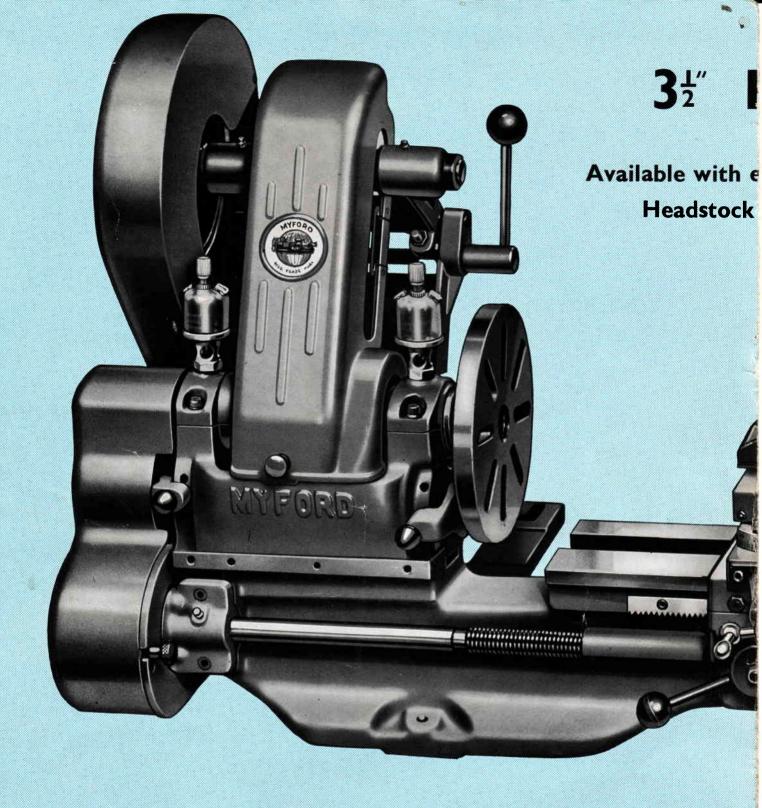
DITTE TO

ML7 HEAVY DUTY LATHE





BED

Made of close grained iron, heavily ribbed to withstand torsion and scientifically designed to eliminate deflection.



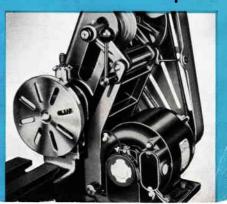
HEADSTOCK

Designed for maximum rigidity and heavy loads; compact back gearing below spindle, with conveniently placed lever.



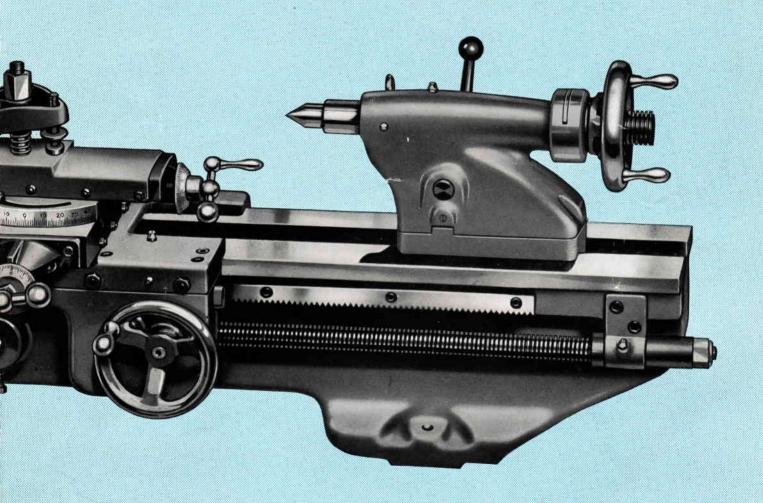
MOTORISING UNIT

Built on to back of lathe bed, incorporating motor platform, provides self-contained machine in minimum space.



HEAVY DUTY LATHE

ADMITTING 20" OR 32" BETWEEN CENTRES ither changewheels or quick change gearbox for leadscrew drive. drive either Tri-leva Speed Selector or plain or with clutch.



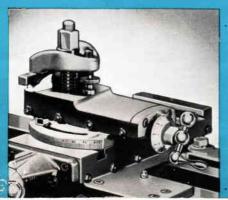
CARRIAGE

Boring table type cross slide of large area. Saddle clamp for facing. Peel-off shim adjustment for saddle keep plates.



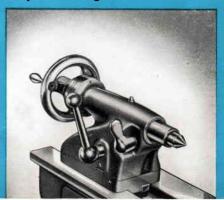
TOP SLIDE

Arranged to swivel 63° either way, with graduated base; Universal tool clamp plus provision for four tool turret.



TAILSTOCK

Quick action lever clamping to bed; thumb lever for barrel clamping; positive set-over for taper turning.



TYPES AVAILABLE

Cat. No.	at. No. Type Description		Between Centres		
10/001	ML7	Basic Machine	20′′		
10/002	ML7	Basic Machine with 1466 clutch fitted	20′′		
10/003	ML7B	Quick Change Lathe	20′′		
10/004	ML7B	Quick Change Lathe with 1466 clutch fitted	20′′		
10/007	ML7	Basic Machine		32"	
10/008	ML7	Basic Machine with 1466 clutch fitted		32"	
10/009	ML7B	Quick Change Lathe		32**	
10/010	ML7B	Quick Change Lathe with 1466 clutch fitted		32**	
10/015	ML7T	Tri-Leva Speed Selector Lathe (Changewheel machine)	20′′		
10/016	ML7BT	Tri-Leva Speed Selector Lathe with quick change gearbox	20′′		
10/017	ML7T	Tri-Leva Speed Selector Lathe (Changewheel machine)		32′′	
10/018	ML7BT	Tri-Leva Speed Selector Lathe with quick change gearbox		32′′	

SPECIFICATION (mc/s admitting 20")

BED

		273	3 ft. 0½ in.
Width across shears		***	$4\frac{1}{2}$ in.
Depth of Shears	***		$\frac{1}{2}$ in.
Swing over bed			7 in, dia.
Maximum admitted	betwe	een	
centres			I ft. 8 in.
Swing in gap			10 in dia.
Swing in gap in front	of fac	eplate	li in.
Depth of Bed		***	5½ in.

HEADSTOCK

TIERDS I O CIT					
Centre height			104	31	in.
		4564	***	$7\frac{3}{8}$	in.
	***	***	4.44	43	in.
Front Bearing	***	in.	dia. ≻	2	in.
Rear bearing		in. di	a. ×	13	in.
Ball thrust					
Spindle nose register					
Spindle nose thread	11	in. d	ia. \times l	2 T	PI
Spindle nose bored	***	555	No.	2 1	1T
Hole through spindle			19 i	n. d	ia.
Backgear reduction	***		5.7	8 to	1
Size of headstock vee	belt 1	in "	A" S	ectio	on
Faceplate (8 slots)		***	63 i	n, d	ia.
(a) (b) (c)					

6 SPINDLE SPEEDS—Standard Motor Drive Machine (1420 R.P.M. Motor)

Range ungea	red	***	640	, 357, 200
Back geared	***	***	***	10, 62, 35
Alternative	range	when		is fitted
with $2\frac{1}{2}$ in.	pulley	2.6.4	870 to	47 r.p.m.

CARRIAGE

Area of saddle bearing on	bed	19 sq. in.
Swing over cross slide	***	4½ in. dia.
Cross slide travel		5 in.
Area of cross slide top (bo	oring	
table area)	***	30 sq. in.
Top slide travel	132	2½ in.
Top slide swings either sid	e of :	
Top slide and cross slide		
screws		10 TPI Acme
Micrometer dials (1½ in.		
		-001 in.
Leadscrew		
Standard screwcutting ran		6-112 TPI
Standard screwcutting ran		·25 to 4 mm.
Standard finest feed		

TAILSTOCK

Barrel bored		No. 2 MT

Barrel bored throu,	gh	 👭 in. dia.
Barrel travel		 2 ³ in.
Set over to front		 $\frac{7}{16}$ in.
Set over to rear	***	 🚴 in.

OVERALL MEASUREMENTS AND WEIGHTS

Length of lathe including guard,	3 ft. 5 in.
Width of lathe including motor,	
with cross slide full out	2 ft. 1 1 in.
Width of lathe including motor,	
with cross slide in	I ft. 8½ in.
Height of lathe from bench to	
centre point	9‡ in.
Nett weight of bench lathe	
with motorising equip-	
ment, but less electric mote	
Overall length of cabinet stand	3 ft. 6 in.
Height (to top of jack screws)	2 ft. 10½ in.
Overall width of cabinet stand	I ft. $3\frac{1}{4}$ in.
Nett weight of cabinet stand	120 1Ь.

SPECIFICATION, Long Bed Machines,

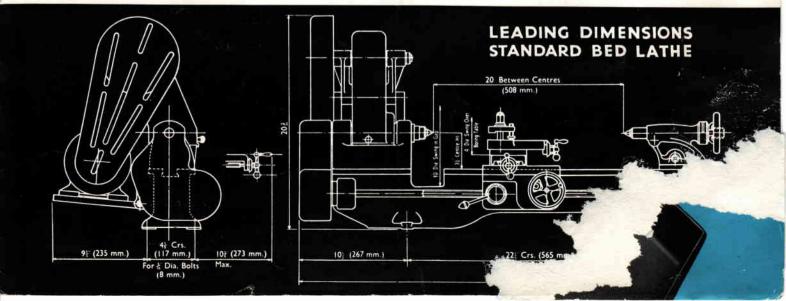
as above, except:- overall bed length, maximum admitted between centres, length of Lathe including guard, overall length of cabinet stand, all increased by 12".

Nett weight of bench Lathe, less motor 196 lbs.

Nett weight of bench Lathe, less mot Nett weight of cabinet stand 150 lbs.

STANDARD EQUIPMENT

(except Quick Change Machines) includes:- $6\frac{3}{4}$ in. diameter faceplate, catchplate, 4 in. diameter backplate, set of 14 changewheels and spacer, changewheel guard, two double-ended spanners, $\frac{7}{16}$ in. B.S.F., $\frac{3}{8}$ in. B.S.F., and $\frac{5}{16}$ in. B.S.F. $\frac{1}{4}$ in. B.S.F., key for backgian lock, key for bearing cap screws, key for grub screws, oil gun, screw-cutting chart, centres for headstock and tailstock, two belt guards, vee belts and motor pulley.



TRI-LEVA LATHES

ML7T & ML7BT TRI-LEVA SPEED SELECTOR LATHES

PATENT No. 818947

give

Instant spindle speed Selection

Nos. 10/015

10/016

10/017

10/018

Nos. 10/015 and 10/017, both type ML7T, admitting 20" and 32" respectively between centres, have the drive to the leadscrew by changewheels.

Nos. 10/016 and 10/018, both type ML7BT, admitting $20^{\prime\prime}$ and $32^{\prime\prime}$ respectively, have the quick change gearbox for the leadscrew drive.

As the name implies, three levers are used for spindle speed selection. The incorporation of the unit does not, in any way, affect either the backgearing or the drive to the leadscrew.

Speed changing is virtually instantaneous with the TRI-LEVA. Fingertip depression of any one of the conveniently placed selector levers engages the chosen speed on the cone pulley, and automatically disengages the previous speed. Only one motion is required—there is no guard opening or belt slackening procedure involved. It is not even necessary to disengage the speed already in use. The TRI-LEVA does that for you. SIMPLY DEPRESS THE LEVER, AND THE SPEED IS CHANGED.

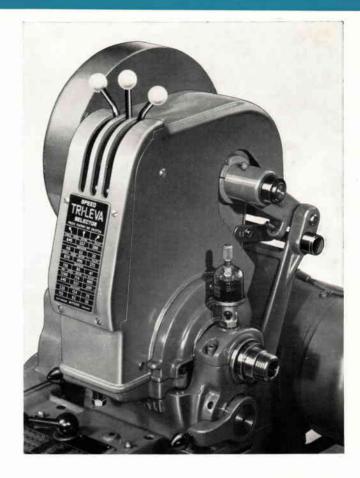
With all the levers in the disengaged position the Lathe spindle is disconnected from the countershaft and remains completely free from belt drag, the belts being "trapped" clear of the pulleys. Thus rotation by hand is easy and greatly facilitates "clocking" with a dial gauge, marking out, setting up, etc.

With all the levers depressed, the Lathe spindle is held stationary by the combined grip of all three belts. This provides a convenient light hold during such operations as hand tapping, marking out, etc., and when working with Myford Patent Collets, giving the required friction to enable the collet nose cap to be tightened or released.

Partial depression of any of the levers will permit "slipping" of the drive. The levers afford a sensitive control of the amount of slip, making this feature very useful when tapping blind holes, threading to shoulders with button dies, etc.

The back gear key is still just as accessible being covered by a hinged guard.





The Tri-Leva may be used to considerable advantage for normal centre lathe work since it will promote efficiency by encouraging speed changing. The turner working an ML7T or ML7BT lathe will accordingly be operating at the correct speed far more often than one operating a lathe not so equipped. When using a normal single speed motor it is generally preferable to have the $2\frac{1}{2}$ " dia. motor pulley which gives the higher range of spindle speeds, 870 to 47 r.p.m., that is, 870, 490 and 275 r.p.m. ungeared.

The advantages of rapid changes become particularly noticeable when using production equipment such as the No. 1408 turret attachment, either with or without the lever operated collet attachment, since the high speed used for boxing down can be instantaneously reduced to a low speed for dieing.

An even greater degree of flexibility can be obtained by using the Tri-Leva in conjunction with a 2 speed motor. This combination gives 6 ungeared spindle speeds from 1,280 to 200 r.p.m., so that turning speeds can be more clearly matched to the correct speeds for different diameters and operations.

No. 20/034	TRI-LEVA Speed Selector as an attachment for existing machine.	or an
	existing machine.	

No. 20/044	Tray Top Cabinet Stand generally as No. 20/023 but
	fitted reversing and speed selector switches (see

No. 60/015	Reversing and speed selector switches for bench or
	wall mounting, with wiring and flexible conduit
	(see left hand column)—for single phase.

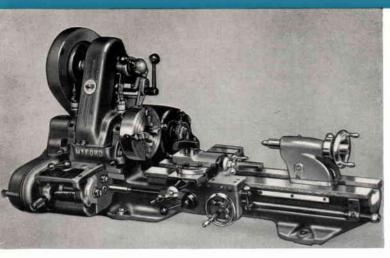
No. 60/016	As above,	but for	three	phase.
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No. 60/0	18	As ab	ove. bu	it for i	three i	nhase
	,	na av	UVE, DU	16 101 1	LIII EE I	عدوااد

No. 60/013	Two speed 2,850/1425	r.p.m.,	0.5/0.25	h.p.	motor,
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No. 60/0	14	As above.	but for	throo	phase
140. 00/0	17	As above.	DUT IOF	three	onase.

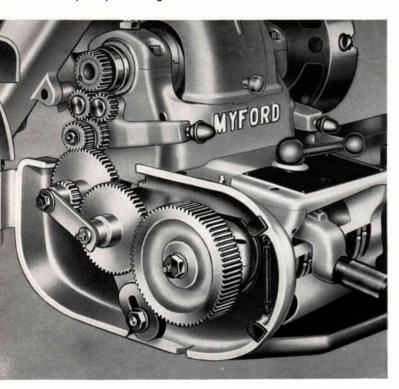
QUICK CHANGE LATHES



No. 10/004 type ML7B Quick Change Lathe admitting 20" between centres fitted with countershaft clutch.

A chart inside the hinged guard covering the input drive gears shows the set-up for 29 metric threads from 0.2 mm. to 4.0 mm. pitch. Twenty three of these pitches, from 0.2 mm. to 3.0 mm. can be obtained merely by manipulating the levers and altering the first driving gear. The book of operating instructions supplied with the gearbox includes a reproduction of the metric chart, also charts for the cutting of B.A. threads from 0 to 12 and to simplify the cutting of worms, from 16 to 120 D.P., and 0.2 to 1.0 module. On certain of the pitches special changewheels are required and these are available.

Many of the diametral pitches are covered by the 1481 metric conversion set but others, also all the module and B.A. pitches, require special changewheels in addition.



Showing headstock end of Quick Change Lathe with gear guard open. Clearly visible are the oil nipples for the quadrant gear pins and input shaft also the swing latch which retains the reversible cluster in position and, below the gearing, the quadrant clamping stud.

Standard Equipment

Faceplate, Catchplate, Backplate, Spanners, Oilgun, Guards, Sight Feed Lubricators, Box Chart for threads (T.P.I.) and feeds also Metric Screwcutting Chart.

ML7B & ML7BT QUICK CHANGE LATHES RAPID SELECTION OF 48 THREADS AND FEEDS

including threads 8 to 56 T.P.I. and feeds .0139 in. to .0020 in. per revolution of spindle

Nos. 10/003 10/004 10/009 10/010 10/016

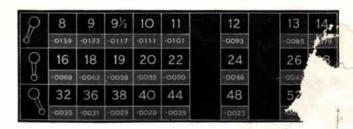
Nos. 10/003 and 10/009, both type ML7B, admitting $20^{\prime\prime}$ and $32^{\prime\prime}$ respectively, have plain drive to the headstock.

Nos. 10/004 and 10/010, both type ML7B, admitting 20" and 32" respectively, are fitted with countershaft clutch.

Nos. 10/016 and 10/018, both type ML7B, admitting 20" and 32" respectively, are Tri-Leva speed selector lathes.

Quick Change Lathes are great time savers, not only when screwcutting but also on general turning since the rate of feed can be instantaneously varied as required. As can be seen from the reproduction of the box chart a very fine feed can be doubled or quadrupled merely by movement of the upper lever. Small variations of feed rate are given by movement of the front lever. Changing the setting of the box from feed to screwcutting is achieved simply by reversing the position of one of the double gears in the input drive; the gear being retained on its stud by means of a swing latch.

The Myford Quick-change Gearbox is designed for smooth, easy operation and long life. The box gears which are all of hardened steel are mounted on precision ground, high tensile steel shafts. The bottom of the box is closed and forms an oil bath in which the lower gears revolve, ensuring lubrication to the teeth throughout. The input gears inside the hinged guard at the end of the lathe are also of hardened steel and run on extra large diameter hardened pins which are provided with oil nipples for pressure lubrication. For maximum rigidity, and to ensure correct meshing of the gears, the gear pins are clamped securely in the holes bored for them in the gear quadrant. The latter is provided with a double anchorage, being clamped to the input shaft housing and to a stud which passes through the quadrant below the gearing.



No. 1480 Quick change gearbox as an attachmachines; complete with hinged gearing, also installation and operati

No. 1481 Metric conversion set, comprising the No. A.2469, 13 changewheels, two spansors of the No. A.1485. Covers of the Shown inside hinged guard.

No. 2469

Slotted quadrant, as included in No. above. May be used for odd pitches conversion where No. 1480 has quently (one eact: 28, 45, 2 and 6 extra 60 tooth changewith metric conversion set).

No. 1485 Two special charge whe set, see above sired when the latter



20/038 Tray Top Cabinet Stand, fitted with two cork mats, deep tray (No. 20/024), raising blocks (No. 20/025) and terminal block only.

Height (to top of jack screws) 34½"

Overall length 42"

Overall width 15½"

For long bed machines No. 20/038L



20/023

This is as 20/038 but fitted with drum type reversing switch, which is wired to terminal block. (See illustration for position). For long bed machines No. 20/023L



20/039

As 20/038 but fitted with push button starter incorporating overload and no-volt release, with wiring to terminal block (see illustration for position).
For long bed machines No. 20/039L

20/040 As 20/038 but fitted with drum type reversing switch and push button starter incorporating overload and no-volt release with wiring to terminal block.

For long bed machines No. 20/040L

When ordering the above Stands, specify voltage and phase so that we can arrange accordingly.



 Overall width
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20/025 32 plecks with jack screws and securing screws.



"ed :ilver metallic.



1486/1 Industrial Stand with isolator, rotary reversing switch for Lathe drive motor, shelf in tool locker, lock and two keys for locker door, and cork mat for open front shelves.

1486/2 Industrial Stand as above, but with push button starter and no-volt and overload releases.

Industrial Stand as above, complete with full coolant equipment, including pump, tank, delivery and return pipes, delivery fitting for saddle with bracket, cock and telescopic pipe, pump switch, push button starter, reversing switch and isolator:—

1486/3A for three phase, with coolant tank, mounted internally.

1486/3B for single phase, with coolant tank, mounted internally.

1486/3C for three phase, with coolant tank, mounted externally.

1486/3D for single phase, with coolant tank, mounted externally.

1487 Splash Guard.



Coolant equipment including pump, tank, delivery and return pipes, delivery fitting for saddle with bracket, cock and telescopic pipe, also pump switch built into pump.

1488/A for three phase.

1488/B for single phase.





Motors & h.p. approximately 1,425 r.p.m. full load speed (D.C. or 50 cycle A.C.) or approximately 1,750 r.p.m. for 60 cycle A.C. Several makes are available and only motors by leading manufacturers are supplied. When ordering state exact voltage, phase and periodicity.

Drum type reversing switch No. 60/004 is a universal switch suitable for single phase or three phase A.C., also for D.C. It can be bench or wall mounted and in the case of change wheel drive Lathes it can be mounted on bracket No. 1374 attached to the Lathe bed just below the headstock. Where the drum type reversing switch and motor are ordered with the Lathe, wiring from switch to motor is included and is protected in flexible metallic conduit.



3-jaw geared scroll chucks with two sets of jaws, one for inside and one for outside, are available in sizes $3\frac{1}{4}$, $4^{\prime\prime}$ and $4\frac{1}{8}$. When supplied with a Lathe they can be fitted to the standard equipment backplate, otherwise they can be fitted to an extra backplate.

3-jaw lever scroll chucks with two sets of jaws, one for inside and one for outside holding, can be supplied in 3" and 4" sizes. Appropriate backplates are available for



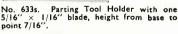
4-jaw independent chucks with reversible jaws are available in 4" and 6" sizes. Again, appropriate backplates are available.



Geared scroll chucks, sizes 4" and 4½" and 4-jaw independent chucks size 6" only, are available with threaded bodies to screw direct on to the spindle nose. This design eliminates the separate backplate resulting in increased rigidity and reduced overhang.



3-jaw drill chucks of the key type with No. 2 morse taper arbors can be supplied in sizes $0 \longrightarrow \frac{\pi}{4}$ and $0 \longrightarrow \frac{\pi}{4}$.





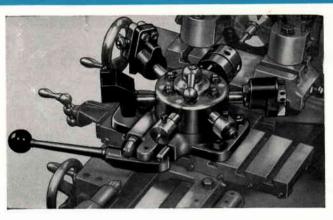


Adjustable Boring Bars, each complete in box with two cutters, spanner and hexagon key. No. 33/01 | Bar 9/16" dia. \times 7", cutter $\frac{1}{4}$ " square. No. 33/012 | Bar $\frac{1}{4}$ " dia. \times 5½", cutter $\frac{1}{4}$ " dia. \times 4½", cutter $\frac{1}{4}$ " square. No. 33/013 | Bar $\frac{3}{4}$ " dia. \times 4½", cutter $\frac{1}{4}$ " square.



No. 111 Toolholder Body. No. 131 Standard Toolholder for §" Tools. No. 132 Boring Toolholder takes §" dia.shanks. No. 134 Parting Toolholder with one §" blade.





For production work the range of equipment includes lever operated collet attachment, cut-off slide, 1408 turret attachment, illustrated above, and multi-stop. With this equipment components normally produced on a Capstan Lathe can be made on the ML7. For the turret attachment, which is shown above fitted with a range of tooling, we can supply items as follows:-

> IA tap holder

> 2A die holder

6A adjustable stop

9A plain round drillholder

12A drilling and facing toolholder

13A drilling and turning toolholder

16A recessing toolholder

17A small drillholder

20A box turning toolholder with vee steadies

28A adjustable knurling toolholder

590A floating holder

'' capacity roller steady box toolholder '' type C.H.S. self releasing diehead Dies for above, standard threads.

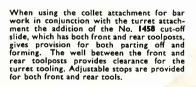
The multi-stop, No. 1483, is bolted on to the back of the bed, and to the saddle, beneath the rear strip. Six length stops are provided and these can be identified with the position of the turret head by means of the colour strips adjacent to each screw which correspond with similar colour markings on the turret head.



The lever operated collet attachment, No. 20/036, has all components hardened and ground, thus ensuring a long life with sustained accuracy. It is of the backplate mounting type so that if subsequently ordered for an existing machine the backplate can be finished in position on the Lathe thus giving the maximum possible degree of concentricity.

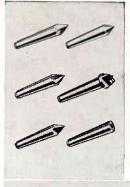


Collets for it, style 1027, are of the "dead length" type. Sizes from $\frac{1}{16}$ " to $\frac{6}{16}$ " \times 32nds., also 2 mm. to 16 mm. \times $\frac{1}{2}$ mm. increments.



The lever operated tailstock attachmer No. 1440A, can readily be interchanged with standard handwheel whenever a numb of components have to be drilled or centre A stop screw with adjustable nuts is fits for accurate depth control.





The range of centres, of No. 2 M.T., includes 75/1248 hard centre for tailstock, 75/1249 soft centre for headstock, 153 square centre, 154 half centre, 155 hollow centre, 1861 wood prong centre and 169 fluted centre.

Long slender shafts require a support adjacent to the tool in order to prevent the work springing under the cutting action. The No. 1413 travelling steady is secured by a single bolt to the facing on the left hand side of the saddle. It has two reversible adjustable bronze bearing steady shoes and will accommodate up to 2" diameter.





The drill pads 170 plain and 171 vee, are made to fit on to a stub arbor, the 155 hollow centre having a parallel portion at the front end for this purpose.

The thread dial indicator, No. 1419, is attached to the right hand side of the apron by means of a stud inserted in the tapped hole provided. It eliminates the necessity of reversing the Lathe to return the carriage to the starting point in order to pick up successive cuts when screw cutting. The dial is numbered and graduated to show when the half nuts should be closed on the leadscrew for subsequent cuts.





The quick setting tools in 18% tungsten high speed steel are available with ½" square shanks, No. 107 and ¾" square shanks, No. 108. A range of 12 selected shapes is available in each size covering all normal turning operations including external and internal screwing, boring etc. Quick setting tools with tungsten carbide tips are available in ½" size only.

A taper turning attachment, No. 1429, is arranged for bolting on to a machined facing at the back of the bed. The holes for the securing screws are so arranged that the attachment can be used along any portion of the bed. Angular movement is 10° either side of zero. The slide base is 9" long giving a working length for taper turning of 6".





Slide rest tools also in 18% tungsten are available with \(\frac{4}{8}'' \) square shanks in sets of eight, No. 105, also sets of twelve, No. 1478, and with \(\frac{4}{8}'' \) square shanks in sets of twelve, No. I115. As with the quick setting tools the sets cover a comprehensive range of shapes for the various operations.

The leadscrew handwheel, No. 1430, has 125 divisions each representing '001". The pointer for it is attached to the bed by means of a single screw inserted into the tapped hole provided. This accessory can be used in order to obtain a fine hand feed to the carriage or for accurate length work during turning, boring or milling operations.





Circular saw table No. 1407 fits on the front of the Lathe cross slide when the top slide and top slide base have been removed. An adjustable fence, also the necessary arbor for the circular saw and one 5" diameter saw for metal are supplied with it.

Work which is too large for mounting on to the standard 63" diameter faceplate can be mounted on to the No. 1437 faceplate which is 9" diameter. It has eight radial slots for the securing bolts for workpieces or angle plates, etc.

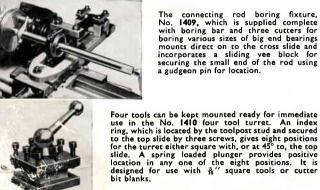




Spare saws for the circular saw table are No. 1431 which is a 5" diameter saw for metal and No. 1432 which is a 6" diameter saw for wood.

No. 1495 dividing attachment is arranged for mounting on to either the 67/1 plain or 68/1 swivelling vertical slide. It is complete with two division plates covering all numbers up to 50 and all even numbers up to 100 excepting 88. A pair of extra division plates, No. 1471, covers No. 88 and all the remaining odd numbers up to 100.





The connecting rod boring fixture, No. 1409, which is supplied complete with boring bar and three cutters for boring various sizes of big end bearings mounts direct on to the cross slide and incorporates a sliding vee block for securing the small end of the rod using a gudgeon pin for location.

The plain vertical slide 67/1 is attached to the cross slide by means of two tee bolts. The slide table is $5\frac{1}{4}^{\prime\prime} \times 2\frac{3}{8}^{\prime\prime}$, the feedscrew is 10 TPI and is fitted with a micrometer dial with .001" graduations.





A three point steady is essential for the facing and centring of long shafts or for turning shafts which are beyond the regular capacity of the Lathe. No. 1412 fixed steady, capacity, 2" diameter bar, has a hinged cap to facilitate loading and unloading and three reversible adjustable bronze bearing steady shoes. It is located between the bed guides and clamped by a single nut.

The swivelling vertical slide 68/1 is attached to the cross slide by means of a single tee bolt and is arranged to pivot in both vertical and horizontal planes. The angle bracket which has large area contact faces for maximum rigidity is graduated for both movements. The table size is $5^{\circ} \times 4^{\circ}$ and the feedscrew is fitted with a micrometer dial having .001" graduations.





Long Cross Slide No. 1447 is 18" longer than the standard and has an extra ree slot. The use of this slide leaves ample space for the work piece between the front and rear tools when the latter is mounted in the No. 1468 rear tool post.

Vee Blocks No. 73—3" \times 1½" \times 1½" and No. 74—4" \times 2'" \times 1½" are in cast iron and are provided with lugs so that they can be readily clamped to the cross slide, the vertical slides or the faceplate





The rear tool post, No. 1468, may be used on either the standard or the long cross slide, though the latter is preferable due to the fact that the space between the tools is otherwise restricted. Tools held in it are inverted so that the Lathe runs in the normal direction of rotation. It will accommodate tools having shanks up to \frac{1}{2}" square.

Carriers (Lathe Dogs) No. 85. Available in three sizes— $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" capacity; these are in phosphor bronze and are provided with square head clamping





Patent Collets, No. 1031, fit direct into the headstock spindle and require only the No. 1438 nose piece and No. 1439 collet closing tube. The latter is intended for closing the collet to simplify insertion into, or removal from, the nose piece. Collets are available in 32nd. increments in sizes ½" to ½" and from 2 to 12.5 mm. in ½ mm. increments. For convenience of storage a polished hardwood case, No. 1484, holds 15 collets, plus the nose piece and collet closing tube.

Faceplate Clamps No. 86. These are in sets of four, and are $2\frac{1}{4}$ " long. They are suitable for clamping work not only to the faceplate but also to the cross slide and to the vertical slides.



Boring Bar No. 228, intended for use between centres. It is 13" long and is complete with three H.S.S. cutters and





Sets of our tee bolts and nuts. 1196-6" long and 1197-3" long are suitable for clamping work to the faceplate, the cross slide or the vertical slides. No. 2422 are provided specially for clamping the No. 71 vice to the cross slide or the vertical slides.





The Hand Rest and Base, No. 1414, is arranged to clamp direct on to the Lathe bed by means of a single bolt. It is supplied complete with one tee rest, either No. 73/1957 for metal or No. 30/002 for wood. These are both 5" long.

In certain locations it is necessary that the Lathe should run exceptionally quietly and in order to achieve this, particularly where it is used chiefly on the high speeds, the 18 and 20 tooth gears on the tumbler reverse lever may be replaced by similar gears made in Tufnol, No. 1781—18 tooth and No. 1782—20 tooth.





Headstock Chucks, either self centring or independent, may, when required, be mounted on the tailstock by means of the No. 1434 adaptor. This has a No. 2 MT shank and a thread at the front end with register, to match the thread and register on the headstock spindle nose.

For exceptionally fine feed the standard cluster gear on the tumbler reverse swing pin may be removed and replaced by the fine feed tumbler cluster No. 1974. In conjunction with the standard change wheel this will give fine feeds down to "0018" per revolution of the headstock spindle. For models ML7 and ML7T, not ML7B or ML7BT,





Tailstock Dieholders No. 1435 for 13 "diameter button dies and No. 1436 for 1" diameter button dies, have No. 2 MT shanks for fitting into the tailstock. They are provided with a sliding head and a pin to prevent rotation. The tailstock barrel may be set so that the head is withdrawn from the pin and rotates with the workpiece when the desired length of thread has been cut.

Protection of the Lathe from dust Protection of the Lathe from dust and atmospheric moisture when it is not in use, is most important. The Lathe cover, No. 1469, which is made in polythene, will give the necessary protection.





The arbor II33A, for holding $\frac{1}{2}$ " bore milling cutters for use between centres is fitted with a driving peg for engagement with the catchplate.

Angle plates are available in three sizes; the smallest is No. 70 which is 3" long and has three tee slots in one face, the other being left blank so that it can be drilled as required, for holding varying sizes of workpiece. The 4" angle plate, No. 227, and the 6"-No. 227B, have slots in both faces.

Precision Ground Surface Plates Precision Ground Surface Plates in cast iron with edges machined square and complete with handles are available in three sizes. No. $33/002-5^{\circ\prime}\times 3\frac{1}{2}^{\circ\prime}$, No. $33/003-7^{\circ\prime}\times 5^{\circ\prime}$ and No. $33/004-10^{\circ\prime}\times 7^{\prime\prime}$.





The machine vice, No. 71, can be mounted on the faceplate, on the cross slide, or on one or other of the vertical slides. It is supplied with a loose law for gripping tapered work. The jaw width is 1\frac{18}{8}" and the maximum jaw opening without the loose jaw is 1\frac{1}{2}"

The Safe Work Light No. 60/007 is complete with transformer, arm in three parts to give full adjustment of movement, shade and bulb. The output is 25 volts 48 watt. When ordering state exact input voltage.



Designs and Specifications subject to change withou: notice

Illustrations not binding in detail.



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