



Colchester

The Colchester Lathe Company Ltd

MASTIFF 1400

Heavy Duty Centre Lathe

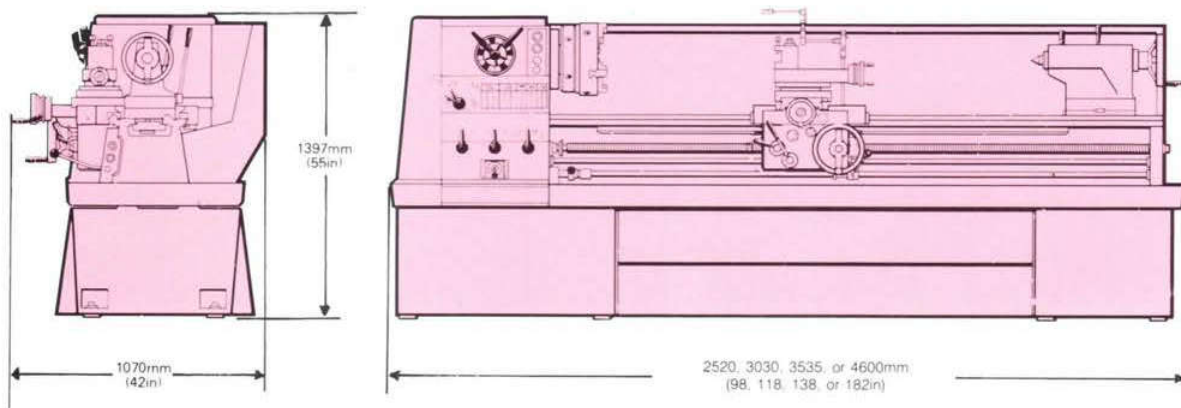
THE 600 GROUP

www.OzarkToolManuals.com



The Colchester Mastiff 1400 is a 535mm (21in) Swing Centre Lathe with a between centres capacity of up to 3 metres (120in). The heavy duty spindle arrangement makes the machine ideal for both production and repair work applications on heavier workpieces.

- 16 Spindle Speeds 18—1400 r.p.m. in Geometric Progression
- 12.5 h.p. (9.3kw) motor
- 11in. D.I. Camlock spindle nose mounting — 90mm Spindle Bore
- Induction hardened and precision ground bed.





Headstock

- Hardened and Reishauer-ground gears on main transmission
- Multi-plate clutches
- Failsafe electromagnetic spindle brake
- Spindle mounted on Gamet micron precision machine tool spindle bearings guaranteeing roundness accuracy better than 2 microns

Gearbox

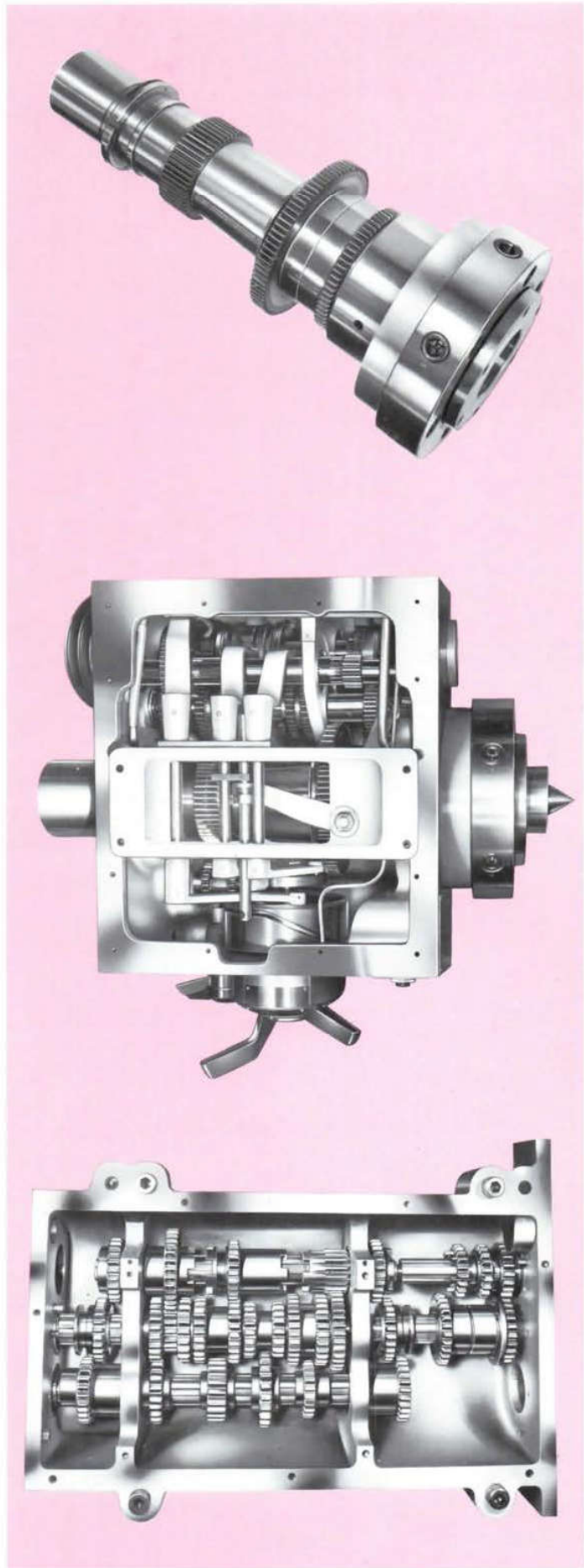
- Totally enclosed Universal gearbox
- Sliding gear principle optimises mechanical efficiency and minimises wear
- Hardened gears and clutches

Apron

- Totally enclosed oil bath, double wall apron
- Automatic feed trip
- Feed reverse plunger
- Handwheel disengages for rapid screwcutting

Saddle and Slides

- Micrometer dials — 0.02mm (0.001in) fitted to top and cross slide
- Cross slide nut incorporates backlash eliminator
- Bedway wipers fitted as standard



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Specification

Height of Centres	10½in (270mm)	Width of Bedways	13½in (340mm)
Swing over bed	21in (535mm)	Total travel of cross slide	11in (280mm)
Swing over cross slide	14½in (370mm)	Total travel of top slide	6in (150mm)
Spindle bore (max. bar dia.)	3½in (90mm)	Total travel of tailstock barrel	9in (230mm)
Spindle nose mounting	11in D1 Camlock	Number of spindle speeds	16
Taper in spindle nose bush	No. 5 Morse	Range of spindle speeds	18-1400 r.p.m.
Taper in tailstock barrel	No. 5 Morse	Overall width of machine	42in (1070mm)
GAP BED MODELS Swing in gap Width in front of faceplate	32in (815mm) 8½in (215mm) 9½in (241mm)	Overall height of machine	55in (1397mm)
		Drive	Vee belts and clutches
		Motor	12.5 h.p. (9.3kw)
THREADS:		FEEDS	
No. of Whitworth threads	38	Range of sliding feeds per rev. of spindle	0.002in—0.032in (0.06mm—1.0mm)
Range of Whitworth threads	2-72 t.p.i.		
No. of Diametral pitches	27		
Range of Diametral pitches	8-60 D.P.	Range of surfacing feeds per rev. of spindle	0.001in—0.016in (0.03mm—0.5mm)
No. of Metric pitches	40		
Range of Metric pitches	0.4-14mm		
No. of Module pitches	18		
Range of Module pitches	0.3-3.5 mod.		

Standard Equipment (unless otherwise specified). Centre bush — Two No. 5 Morse Taper centres — Thread indicator — Electrical equipment for standard 3 phase 50 cycle a.c. supply, 110 volt control — Set of spanners and keys — Instruction and spare parts manual — Accuracy chart — Electrical coolant, pump, tank and fittings — Emergency Stop Button — Lockable Isolator switch — One-shot saddle lubrication — Electro-magnetic spindle brake — Splash guard — Chuck guard — 3 Jaw Chuck — Quick Change Toolpost.

Models available

Code Word	Bed Type	Distance between Centres	Overall Length of Machine	Weight
MASTIFF 1400 40-straight	straight	40in	98in	5110 lb
MASTIFF 1400 40-gap	gap	1000mm	2520mm	2320kg
MASTIFF 1400 60-straight	straight	60in	118in	5440 lb
MASTIFF 1400 60-gap	gap	1500mm	3030mm	2470kg
MASTIFF 1400 80-straight	straight	80in	138in	5770 lb
MASTIFF 1400 80-gap	gap	2000mm	3535mm	2620kg
MASTIFF 1400 120-straight	straight	120in	182in	7160 lb
MASTIFF 1400 120-gap	gap	3000mm	4600mm	3250kg

PRODUCT CODE

Each model is available in the following versions

ENGLISH
METRIC

With English pitch leadscrew; dial graduations in inches.
With Metric pitch leadscrew; dial graduations in millimetres.

For increased versatility, use

COLCHESTER ACCESSORIES

Finish cut hydraulic profiling attachment · High speed threading attachment · Telescopic taper turning attachment · Dual Reading Dials (Metric-English for top and cross slides) · TOOLPOSTS: Four-way Automatic indexing or Quick-change · REAR TOOLPOSTS: Standard or Quick-change · CHUCKS: Additional 315mm three jaw Geared scroll or 400mm four jaw independent, direct on spindle mounting chuck (Note: only use high speed chucks with these lathes) · Stationary

Steady · Travelling Steady · BEDSTOPS · Single, Five-position Longitudinal or Micrometer type · GMT Rotating centre · Face plates: 20in dia. or 27in dia. (for gap bed lathes) · Chip guard · Low volt lighting unit · Power operated Traverse Unit · Digital Readout Unit.

These are a selection of the many accessories available which are detailed in full in the price list.

Illustrations and specifications are not binding in detail. The designs are subject to modification and improvement without notice.

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