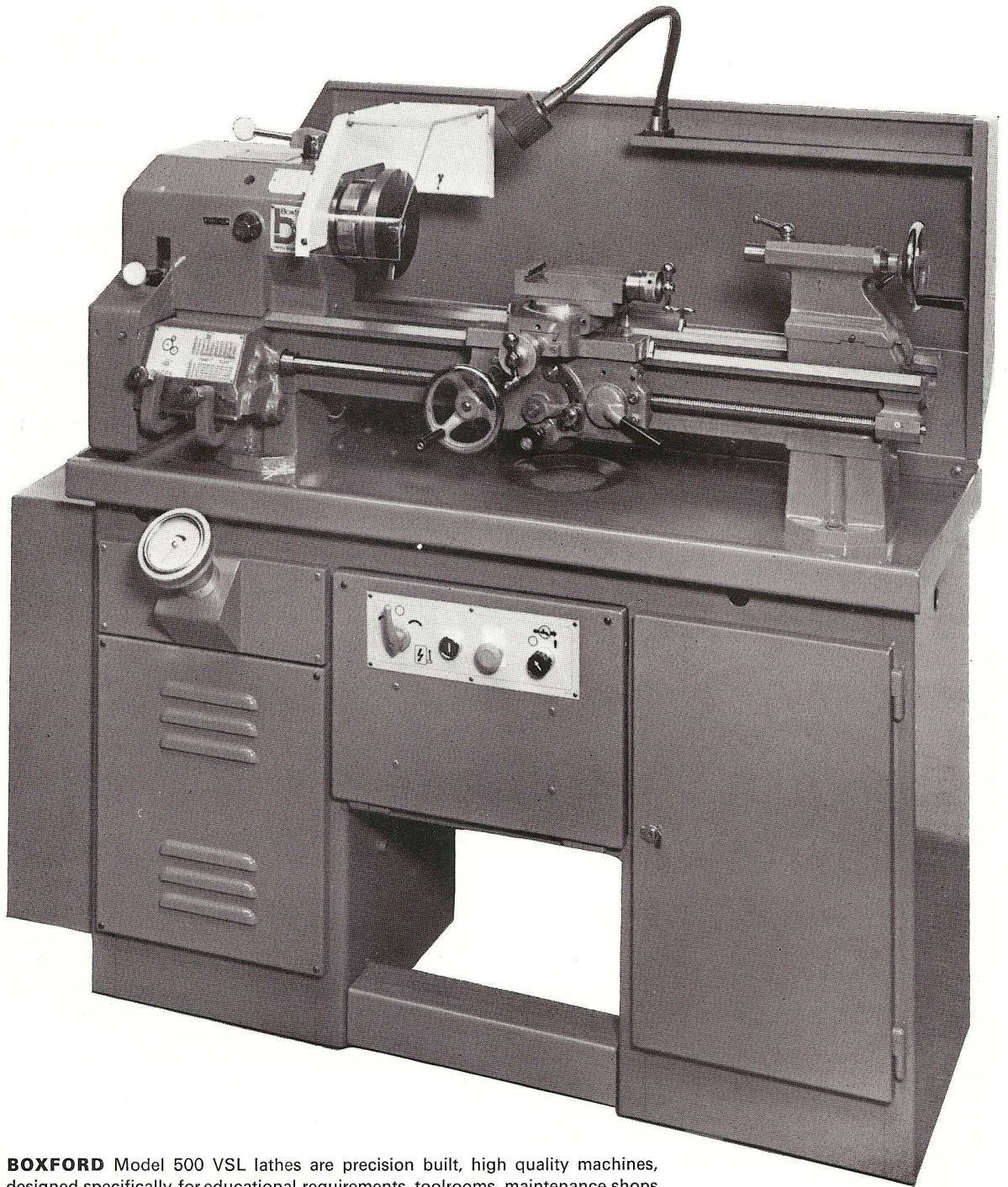


# Boxford

model 500 VSL 250 mm (10")  
swing heavy duty precision  
infinitely variable speed  
screwcutting lathe



**BOXFORD** Model 500 VSL lathes are precision built, high quality machines, designed specifically for educational requirements, toolrooms, maintenance shops and small production workshops.

The compact size inspires early confidence and the craftsman finish develops respect for fine engineering.

Foremost of many features are SAFETY stop buttons and emergency foot bars. Micro switches on opening guards. Overload and power failure cutout switches interlock on headstock lever, and between power feed and screwcutting. Power feeds through friction clutch to prevent major accidents. Chuck guards and rear guards.

# Boxford

## 250 mm (10") swing, infinitely variable speed precision lathe

### SPECIFICATION

	Metric Machine	Imperial Machine
Centre height	127 mm	5"
Distance between centres	510 or 660 mm	20 or 26"
Bed length	1065 or 1220 mm	42 or 48"
Swing over bed	254 mm	10"
Swing over saddle wings	247 mm	9 $\frac{3}{8}$ "
Swing over cross slide	149 mm	5 $\frac{7}{8}$ "
Centre height above tool slide	25 mm	1"
Bed width	150 mm	5 $\frac{1}{8}$ "
Bed depth	115 mm	4 $\frac{1}{2}$ "
Motor drive	1.1 kW	1 $\frac{1}{2}$ h.p.

### Headstock

	(AMERICAN TAPER) LOO	
Spindle nose		
Spindle bored to pass	35 mm	1 $\frac{3}{8}$ "
Speed range (infinitely variable)		
50 cycles	50–2000 r.p.m.	
60 cycles	55–2400 r.p.m.	
Headstock centre	No. 3 Morse	
Tailstock centre	No. 2 Morse	
Draw in collet capacity	26 mm	1 $\frac{1}{16}$ "

### Slides

Cross slide width	86 mm	3 $\frac{3}{8}$ "
Carriage width	254 mm	10"
Compound slide width	65 mm	2 $\frac{9}{16}$ "
Cross slide travel	150 mm	6"
Tool slide travel	66 mm	2 $\frac{5}{8}$ "

### Tailstock

Spindle diameter	27 mm	1 $\frac{1}{16}$ "
Graduations	2 mm	$\frac{1}{16}$ "
Spindle travel	54 mm	2 $\frac{1}{8}$ "
Set-over for taper turning	8 mm	$\frac{5}{16}$ "

### Threads

Range	(52) 0.2–7.5 mm	(48) 4–224 T.P.I.
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### Feeds

Longitudinal (32)	0.07–1.08 mm	(48) .0015–.0853"
Cross (32)	0.02–0.3 mm	(48) .0004–.0252"
Leadscrew	3 mm trapezoidal 8 T.P.I.	

### Weights and Dimensions

Centres	Nett	Gross
510 mm (20")	300 kg (660 lbs)	385 kg (850 lbs)
Case dimensions	135 × 79 × 145 cms	53 × 27 × 53"
660 mm (26")	332 kg (730 lbs)	432 kg (950 lbs)
Case dimensions	169 × 79 × 145 cms	

N.B. Machines can be supplied for either the Imperial (English) or Metric Systems.

*The makers reserve the right to alter designs, specifications and prices without notice.*

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Cables: Boxford Halifax

**THE BED** rigidly constructed from close grained cast iron, precision machined having three vees and one flat.

**THE MAIN SPINDLE** which is bored to pass 35 mm (1 $\frac{3}{8}$ ") is mounted on precision taper roller bearings, has a hardened and ground standard LOO taper nose. A spindle lock is fitted at the front of the headstock.

**THE HEADSTOCK** provides infinitely variable speeds which are accurately indicated by the dial indicator. The back gears are induction hardened and controlled by a single electrically interlocked lever.

**A NORTON TYPE GEARBOX** is fitted to provide quick changes of threads and feeds. Gears for non-standard pitches and conversion sets are also available.

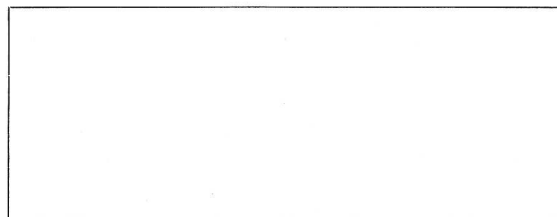
**THE LONGITUDINAL AND CROSS SLIDE** power feeds are obtained through the friction clutch of the Automatic Apron, with the drive from the combined leadscrew and driveshaft. The cross slide and top slide leadscrews are fitted with ball thrust races and the micrometer dials are friction mounted. The compound rest is graduated through 180° and the top slide is suitable for mounting most types of toolholders. All gib locking and adjusting screws are of the Wedglock type for easier adjustment when necessary.

**THE TAILSTOCK** locating on the centre vee and front flat of the lathe bed can be 'set-over' for turning slight tapers and has a lever at the rear for quick action locking. The barrel is graduated for control of depth when drilling and is self ejecting for standard No. 2 Morse shanks.

**THE CABINETBASE** is fabricated of heavy gauge steel and houses the drive unit beneath the headstock whilst the tailstock cupboard provides storage for tools and accessories etc. The rear central compartment is made as a coolant tank ready to receive an electric coolant pump when required.

**ELECTRICS** The electrical equipment is mounted on a centrally located hinged panel, incorporating push button starter with overload and no-volt protection. Spindle direction is controlled by a combined reversing switch and mechanically/electrically interlocked panel isolator.

**STANDARD EQUIPMENT** Boxford Q.C. (Quick Change) Toolpost (other types available), Two Morse Taper Centres, Headstock Spindle Sleeve, Driver Plate, Oil can, Spanners, Allen Keys and Instruction Manual.



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