



# Manual Lathes

*Now with Optional CSS DRO*

**The world turns on Colchester lathes**





## Engineered for efficiency

Colchester manual lathes are renowned worldwide for quality and reliability. Built to withstand rugged, heavy duty use, our lathes give years of outstanding service with the absolute minimum of maintenance. At the same time, all Colchester manual lathes are capable of very fine precision turning.

Our VS manual lathes produce outstanding results not least due to their infinitely variable spindle speed feature. The optional CSS DRO allows exactly the right speed for every job so tools perform better, cycle times are optimised and quality improves.

Our entire range gives you exceptional ease of use and a huge choice of optional and ancillary equipment guarantees top of the range performance even for the most complex and challenging jobs.

With our investment in modern machine tool manufacturing technology, plant and assembly techniques, coupled with the latest quality-driven methodology and business practices, Colchester is able to provide the same traditional solution to customers as yesteryear. However, today, customers have the additional benefit of a lathe building company driven by the ambition of a 'world-class' strategy.

## Why settle for less?

# STUDENT 2500



- Fully geared headstock with 12 spindle speeds from 40-2500rpm
- 2.2kW (3hp) spindle motor
- 635mm and 1000mm bed length options
- 330mm swing over bed
- DI-4 Camlock spindle nose
- Induction hardened and ground bed
- Fully universal gearbox with most metric and imperial threads catered for
- Built to standards in excess of DIN 8606 and BS4656 Part I
- Optional DRO (no CSS)
- Super high precision Gamet spindle taper roller bearings
- The "number 1" choice of training establishments worldwide

# MASTER VS 3250



- Advanced variable speed spindle drive from 17-3250rpm in 3 infinitely variable ranges. Constant power in all ranges
- 7.5kW (10hp) spindle motor
- 650mm gap bed
- 350mm swing over bed
- DI-4 Camlock spindle nose
- Induction hardened and ground bed
- Precision hardened and ground gears in headstock
- Built to exceed all known world safety standards
- The ultimate variable speed training lathe
- CSS DRO optional

# TRIUMPH VS 2500



- Constant power, 3 range variable speed drive from 14-2500rpm
- 7.5kW (10hp) spindle motor
- 1250mm gap bed
- 400mm swing over bed
- D1-6 Camlock spindle
- Induction hardened and ground bed
- Precision hardened and ground gears in headstock
- Wide, rigid bed
- The world's "best known" centre lathe
- CSS DRO optional

# MASCOT VS 2000

- Medium duty, constant power, variable speed spindle drive in 3 ranges from 20-2000rpm
- 11kW (15hp) spindle motor
- 1500mm gap bed
- 460mm swing over bed
- D1-8 Camlock spindle nose
- Induction hardened and ground bed
- Precision hardened and ground gears in headstock
- Fingertip traverse control via saddle mounted joystick
- The "number 1" toolroom/general purpose centre lathe
- CSS DRO optional



# MASTIFF 1800



- Heavy duty, constant power, variable speed spindle drive in 3 ranges from 18-1800rpm
- 11kW (15hp) spindle motor
- 2000mm and 3000mm gap bed length options
- 554mm swing over bed
- DI-II Camlock spindle nose
- Induction hardened and ground bed
- Precision hardened and ground gears in headstock
- Fingertip traverse control via joystick
- World's "number 1" heavy duty production centre lathe
- CSS DRO optional

## The New 600 Lathes CSS DRO

### Constant Surface Speed Features

- Option on all V series lathes
- DRO automatically adjusts spindle speed to maintain constant surface cutting speed during facing operations
- Maximum CSS speed set by key entry or teach function
- Rugged all steel scales with lifetime guarantee
- Speed control via closed loop
- Available in 2 axis or 3 axis (3rd axis display standard)
- Taper function
- 99 Tool offsets
- Vectoring
- Encoder IP67 rated
- Accuracy  $\pm 5\mu\text{m}$ , repeatability 1 count
- Standard on all Variable Speed machines

# SPECIFICATIONS

	STUDENT	MASTER	TRIUMPH	MASCOT	MASTIFF
Height of Centres	167mm	170mm	195mm	230mm	280mm
Bed Length Between Centre	635/1000mm	650mm	1250mm	1500mm	2000/3000mm
Swing over Bed	330mm	350mm	400mm	460mm	554mm
Swing in Gap	480mm	535mm	585mm	730mm	830mm
Swing over Cross Slide	210mm	196mm	246mm	270mm	370mm
Spindle Bore	40mm	42mm	54mm	76mm	90mm
Spindle Nose Mounting	D1-4 Camlock	D1-4 Camlock	D1-6 Camlock	D1-8 Camlock	D1-11 Camlock
Morse Taper in Nose Bush	No. 3 MT	No. 3 MT	No. 4 MT	No. 5 MT	No. 5 MT
Number of Speed Ranges	12	3 Variable	3 Variable	3 Variable	3 Variable
Range	40-2500rpm	17-3250rpm	14-2500rpm	20-2000rpm	18-1800rpm
Motor	2.2kW	7.5kW	7.5kW	11kW	11kW
Number of Metric Pitches	45	51	51	66	66
Range of Metric Pitches	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm
Number of Imperial Pitches	52	56	56	73	73
Range of Imperial Pitches	2 to 56 TPI	2 to 56 TPI	2 to 56 TPI	2 to 84 TPI	2 to 84 TPI
Number of Diametral Pitches	18	20	20	27	27
Range of Diametral Pitches	8 to 56 DP	8 to 56 DP	8 to 56 DP	8 to 72 DP	8 to 72 DP
Number of Module Pitches	18	20	20	20	20
Range of Module Pitches	0.3 to 3.5 MOD	0.2 to 3.5 MOD	0.2 to 3.5 MOD	0.2 to 3.5 MOD	0.2 to 3.5 MOD
Width over Bedways	140mm	318mm	318mm	400mm	400mm
Travel of Cross Slide	190mm	250mm	250mm	300mm	300mm
Travel of Top Slide	92mm	100mm	100mm	150mm	175mm
Tailstock Travel	110mm	145mm	145mm	145mm	178mm
Taper in Tailstock Barrel	No. 3 MT	No. 4 MT	No. 5 MT	No. 6 MT	No. 6 MT
Weight	710/790kg	1550kg	1800kg	2980kg	3250/3610kg
Dimensions L x W x H	1.68x.97x1.40 2.13x1.02x1.45	2.03x1.35x1.65	2.72x1.35x1.65	3.25x1.70x2.05	3.75x1.70x2.10 4.75x1.70x2.10

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