



Centre Lathes



CENTRE LATHES

with CSS DRO as standard

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 standard ACU-RITE 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.

Student

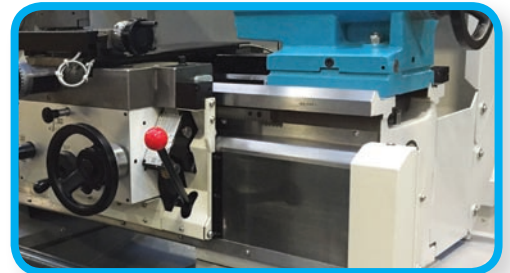


- Fully geared headstock with 12 spindle speeds from 40-2500rpm
- 2.2kW (3hp) spindle motor
- 635mm and 1000mm bed length options
- 330mm swing over bed
- D1-4 Camlock spindle nose
- Induction hardened and ground bed
- Fully universal gearbox with most metric and imperial threads catered for
- Built to standards in excess of DIN 8606 and BS4656 Part 1
- Optional DRO (no CSS)
- Super high precision Gamet taper roller spindle bearings
- The "number 1" choice for training establishments worldwide

Master VS*

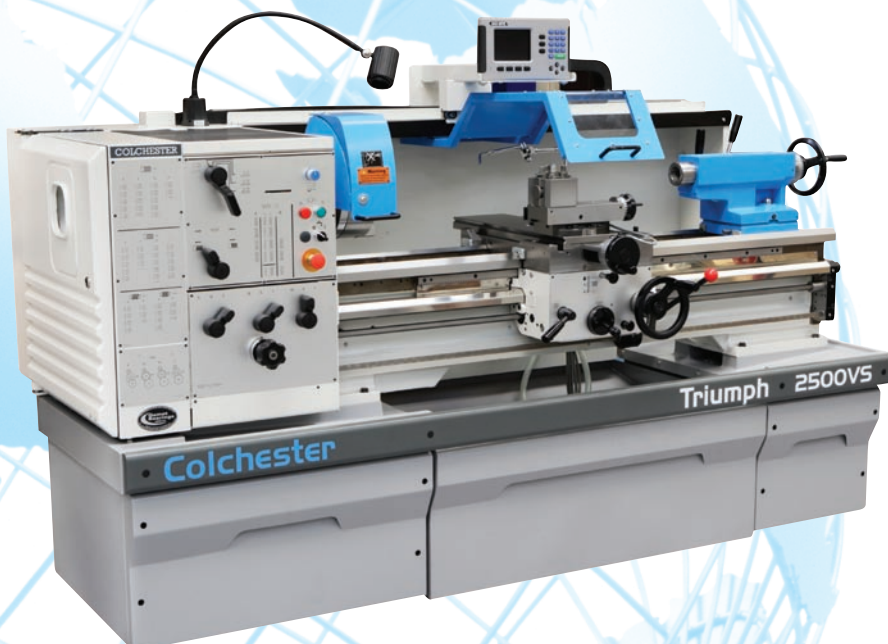


- New ergonomic design for optimum performance
- Advanced variable speed spindle drive from 17-3250rpm in 3 infinitely variable ranges
- 7.5kW (10hp) spindle motor
- 650mm gap bed
- 350mm swing over bed
- D1-4 Camlock spindle nose
- Induction hardened and ground bed
- Precision hardened and ground gears in headstock
- Built to exceed all known world safety standards
- The ultimate variable speed training lathe
- CSS DRO as standard



* Optional apron covers now available

Triumph VS*



- New ergonomic design for optimum performance
- 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
- The world's "best known" centre lathe
- CSS DRO as standard

Mascot VS

- Medium duty, constant power, variable speed spindle drive in 3 ranges from 20-2000rpm
- 11kW (15hp) spindle motor
- 1000, 1500 and 2000mm gap bed length options
- 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 as standard



Mastiff VS

- 104mm spindle bore
- Heavy duty, constant power, variable speed spindle drive in 3 ranges from 18-1800rpm
- 11kW (15hp) spindle motor
- 1000 to 3000mm gap bed length options
- 554mm swing over bed
- D1-11 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 as standard



Magnum



- 104mm spindle bore with 155mm option
- Heavy duty 20kW (30hp) spindle motor
- 1500 to 6000mm gap bed length options now available
- Heavy duty variable speed spindle drive in 3 constant power ranges from 18 -1800 rpm (1000rpm on 155mm bore option)
- 680mm swing over bed
- Induction hardened & ground bed
- Precision hardened and ground gears in headstock

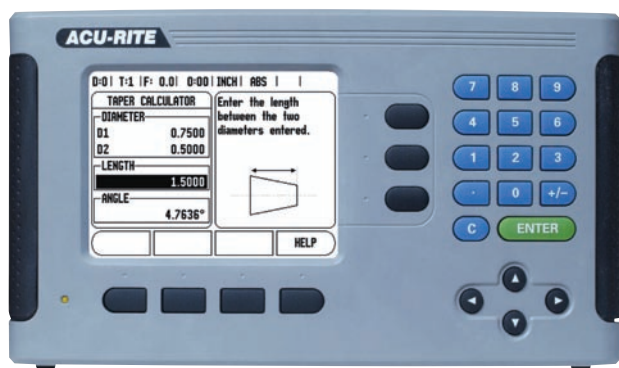
Magnum LS



- 104mm spindle bore with 155 and 230mm options
- Heavy duty 20kW (30hp) spindle motor
- 1500 to 6000mm gap bed length options now available
- Heavy duty variable speed spindle drive in 3 constant power ranges from 18 -1800 rpm (1000rpm on 155mm bore and 600rpm on 230mm options)
- 820mm swing over bed
- Induction hardened & ground bed
- Precision hardened and ground gears in headstock

Digital Readout with Constant Surface Speed Features

- Standard on all VS series lathes ⁺
- DRO automatically adjusts spindle speed to maintain constant surface cutting speed during facing operations
- Lock axis feature to establish tool offsets with tool under load
- Instant conversions for radius/diameter and inch/metric
- Position-TRAC™ a unique feature to re-establish workpiece zero after power loss
- 2axis or 3axis LCD display with graphics and conversational prompt
- Absolute and incremental displays with pre set and zero reset
- Taper calculator
- 16 Tool offsets/diameter
- Near zero warning
- Intuitive operation with multi-language support
- Accuracy $\pm 5\mu\text{m}$, repeatability within 1 count



Student

Height of Centres	167mm
Bed Length Between Centre ⁺⁺	635/1000mm
Swing over Bed	330mm
Swing in Gap	480mm
Swing over Cross Slide	210mm
Spindle Bore	40mm
Spindle Nose Mounting	D1-4 Camlock
Morse Taper in Nose Bush	No. 3 MT
Number of Speed Ranges	12
Range	40-2500rpm
Motor	2.2kW
Number of Metric Pitches	45
Range of Metric Pitches	0.2 to 14mm
Number of Imperial Pitches	52
Range of Imperial Pitches	2 to 56 TPI
Number of Diametral Pitches	18
Range of Diametral Pitches	8 to 56 DP
Number of Module Pitches	18
Range of Module Pitches	0.3 to 3.5 MOD
Width over Bedways	140mm
Travel of Cross Slide	190mm
Travel of Top Slide	92mm
Tailstock Travel	110mm
Taper in Tailstock Barrel	No. 3 MT
Weight	710/790kg
Dimensions L x W x H	1.68x.97x1.40 2.13x1.02x1.45

⁺ Options on Magnum and Magnum LS models.

Specifications

Master VS	Triumph VS	Mascot VS	Mastiff VS	Magnum	Magnum LS
170mm	195mm	230mm	280mm	335mm	412mm
650mm	1250mm	1000/1500/2000mm	1000/1500/2000/3000mm	1500/2000/3000/4000/5000/6000mm	
350mm	400mm	460mm	554mm	680mm	820mm
535mm	585mm	730mm	830mm	940mm	1060mm
196mm	246mm	270mm	370mm	430mm	580mm
42mm	54mm	76mm	104mm	104 / 155mm	104 / 155 / 230mm
D1-4 Camlock	D1-6 Camlock	D1-8 Camlock	D1-11 Camlock	D1-11 / A2-11	D1-11 / A2-11 / A2-15
No. 3 MT	No. 4 MT	No. 5 MT	No. 5 MT	No. 6 MT	No. 6 MT
3 Variable	3 Variable	3 Variable	3 Variable	3 Variable	3 Variable
17-3250rpm	14-2500rpm	20-2000rpm	18-1800rpm	18-1800 / 1000 rpm	18-1800/1000/600 rpm
7.5kW	7.5kW	11kW	11kW	20kW	20kW
51	51	66	66	59	59
0.2 to 14mm	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm	0.2 to 14mm
56	56	73	73	51	51
2 to 56 TPI	2 to 56 TPI	2 to 84 TPI	2 to 84 TPI	2 to 84 TPI	2 to 84 TPI
20	20	27	27	27	27
8 to 56 DP	8 to 56 DP	8 to 72 DP	8 to 72 DP	8 to 72 TPI	8 to 72 TPI
20	20	20	20	20	20
0.2 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 3.5mm	0.2 to 3.5mm
318mm	318mm	400mm	400mm	480mm	480mm
250mm	250mm	300mm	300mm	406mm	406mm
100mm	100mm	150mm	175mm	165mm	165mm
145mm	145mm	145mm	178mm	300mm	300mm
No. 4 MT	No. 5 MT	No. 6 MT	No. 6 MT	No. 6 MT	No. 6 MT
1550kg	1800kg	2700 / 2980 / 3300kg	2850 / 3050 3250 / 3610kg	3700 / 4000 / 4700 5400 / 6100 / 6800kg	4400 / 4900 / 6000 7100 / 8200 / 9300kg
2.03x1.35x1.65	2.72x1.35x1.65	2.75 / 3.25 3.75x1.70x2.05	2.75 / 3.25 / 3.75 4.75x1.70x2.10	3.85 / 4.35 / 5.35 / 6.35 7.35 / 8.3 x 1.8 x 1.9	3.85 / 4.35 / 5.35 / 6.35 7.35 / 8.3 x 1.8 x 1.9

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

++ Dependant on tailstock, centres and tooling specified.



Colchester Manual Lathes

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