



Harrison are the British centre lathe specialists with over 100 years manufacturing experience and are the UK's largest machine tool company with over 140,000 lathes in operation worldwide.

Harrison are the world's number one producer of computer assisted centre lathes with an annual production capacity of over 2,500 lathes.

Talk to the specialists NOW!

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CENTRE LATHES

	M300	V350	V390	V460	V550
Centre Height	167 mm	170 mm	170 mm	230 mm	280 mm
Swing Over Bed	330 mm	350 mm	350 mm	460 mm	554 mm
Swing Over Cross Slide	210 mm	197 mm	197 mm	270 mm	370 mm
Swing In Gap Diameter	480 mm	533 mm	533 mm	730 mm	830 mm
Distance Between Centres	635/1000 mm	650 mm	1250 mm	1500 mm	2000/3000 mm
Spindle Bore	40 mm	43 mm	43 mm	76 mm	90 mm
Speeds Number	12	3 infinitely variable	3 infinitely variable	3 infinitely variable	3 infinitely variable
Speeds Range	40 - 2500 rpm	17 - 3250 rpm	17 - 3250 rpm	20 - 2000 rpm	18 - 1800 rpm
Motor	2.2 kW	7.5 kW	7.5 kW	11 kW	11 kW



ALPHA U 1000 RANGE

FLEXIBLE - FOUR MACHINES IN ONE!

The Alpha U is like no other turning system on earth. From a single console the machine can be operated manually, semi automatically, under full CNC or remotely to produce virtually any batch size of any turned shape.

In manual operation using the electronic handwheels the Alpha U can be used exactly like a conventional lathe. Any turner can use this machine.



	1330U	1400U	1460U	1550U
Swing Over Bed	360 mm	400 mm	460 mm	554 mm
Swing Over Cross Slide	206 mm	245 mm	270 mm	370 mm
Swing In Gap	N/A	585 mm	730 mm	830 mm
Distance Between Centres	760 mm	1250 mm	1500 mm	1000/2000 mm
Spindle Bore	42 mm	55 mm	78 mm	104 mm
Speeds Number	Single variable	2 infinitely variable	2 infinitely variable	2 infinitely variable
Speeds Range	160 - 3500 rpm	7 - 2500 rpm	5 - 2000 rpm	5 - 1800 rpm
Constant Power Range	635 - 3500 rpm	125 - 2500 rpm	100 - 2000 rpm	90 - 1800 rpm
Motor	7.5 kW	7.5 kW	11 kW	15 kW

THE HARRISON RANGE

THE LARGEST RANGE OF CENTRE LATHES IN THE WORLD



THE ALPHA X SERIES THE ULTIMATE TURNING MACHINES

The World's best Manual/CNC Lathe is now even faster, has more power and the very latest and best GE Fanuc total system solution available: servos, spindle, drives, control, operator panel and all electricals.

Harrison design engineers have added over 85 improvements and enhancements (including a milling facility on the 1550XM) to the World's leading range of Alpha lathes and the result is the **Alpha X Series**.

Alpha X is the perfect partner for sub contractors, toolrooms, R&D and all education and training applications.

- New high performance lathes with 85 improvements
- Greater cutting performance
- Higher spindle speeds with wider ranges
- Faster rapid traverse rates
- Greater spindle torque at low speeds
- Latest Fanuc Beta / Series spindle and axis motors
- Uprated GAMET high-precision bearings

The much improved new Alpha range from Harrison offer a choice of six advanced technology lathes to suit all types of high-precision turning applications. In addition the all new, versatile Alpha 1550 XM has the capability for milling as well as turning. This innovative new machine introduces an important extra dimension, especially for customers who have previously invested in separate lathes and milling machines.

All new Alpha X Series lathes are perfectly suited to producing detailed and intricate one-offs to the highest standard of finish and accuracy. With their advanced Harrison/Fanuc controls and bespoke software systems, they are ideal for turning

small-to-medium sized batches with fast, high quality repeatability, excellent accuracy and surface finish and, most importantly of all, lower component production costs.

No other lathes on the market today, including full CNC machines can compete with Harrison's Alpha X Series for speed of production when it comes to 'one-offs' and small-batch turned parts.



ALPHA XS



ALPHA XM

ALPHA 1550 XM C-Axis

Motor max torque 4Nm
Output max torque 152Nm
Max output speed 105rpm
Resolution 0.001°



ALPHA XT

Alpha XS and XM



Features Include:

- Ultra high speed 21i TB CNC
- 10.4" colour touch screen
- 2 Software systems
 - Harrison "Alpha System"
 - Fanuc Manual Guide *i*
- Industry standard ISO CNC programming
- PCMCIA (flash card) and RS232 communication ports
- Twin MPG handwheels and rapid traverse joystick

Alpha XT



Features Include:

- Latest Alpha T control
- 7.5" mono touch screen
- Fanuc Turnmate *i* conversational shop floor programming
- ISO - Industry standard CNC
- Sliding operators console for convenience during loading and setting up
- "One-click-one-micron" feel handwheels

	1350XS	1400XS	1460XS	1550XS	1800S - 120	1800S - 170	1550XM
Centre Height	170 mm	195 mm	230 mm	280 mm	395 mm	395 mm	280 mm
Swing Over Bed	350 mm	400 mm	460 mm	554 mm	800 mm	800 mm	554 mm
Swing Over Cross Slide	196 mm	245 mm	270 mm	370 mm	520 mm	520 mm	370 mm
Swing In Gap Diameter	535 mm	585 mm	730 mm	830 mm	870 mm	870 mm	830 mm
Distance Between Centres	650 mm	1250 mm	1500 mm	2000/3000 mm	2000/3000/4000 mm	2000/3000/4000 mm	2000/3000 mm
Spindle Bore	42 mm	55 mm	78 mm	104 mm	120 mm	170 mm	104 mm
Speeds Number	3 infinitely variable	3 infinitely variable	3 infinitely variable	3 infinitely variable	2 infinitely variable	2 infinitely variable	3 infinitely variable
Speeds Range	1 - 3500 rpm	1 - 2700 rpm	1 - 2200 rpm	1 - 2000 rpm	1 - 1500 rpm	1 - 1000 rpm	1 - 2000 rpm
Constant Power Range	86 - 3500 rpm	69 - 2700 rpm	67 - 2200 rpm	64 - 1970 rpm	153 - 1500 rpm	102 - 1000 rpm	64 - 1970 rpm
Motor	7.5 kW	7.5 kW	11 kW	11 kW	26 kW	26 kW	11 kW

	350XT	400XT	460XT	550XT
Centre Height	170 mm	195 mm	230 mm	280 mm
Swing Over Bed	350 mm	400 mm	460 mm	554 mm
Swing Over Cross Slide	196 mm	245 mm	270 mm	370 mm
Swing In Gap Diameter	535 mm	585 mm	730 mm	830 mm
Distance Between Centres	650 mm	1250 mm	1500 mm	2000 mm
Spindle Bore	42 mm	55 mm	78 mm	104 mm
Speeds Number	3 infinitely variable		3 infinitely variable	
Speeds Range	20 - 3250 rpm	15 - 2500 rpm	20 - 2000 rpm	18 - 1800 rpm
Constant Power Range	85 - 3250 rpm	125 - 2500 rpm	70 - 2000 rpm	65 - 1800 rpm
Motor	5.5 kW	7.5 kW	11 kW	11 kW