



**PRODUCT RANGE 2025**

# The World Turns On Colchester

## Precision, performance & reliability

Colchester Machine Tool Solutions has been manufacturing high quality machine tools for over 130 years, over which time we've gained the trust of the machining industry across the world. All of our products are designed and manufactured to exceed the highest international quality and safety standards, with precision, performance, and reliability at the forefront.

## British designed and engineered

Our core machine tools are British designed and engineered, providing years of outstanding service with the absolute minimum of maintenance. Backed by our highly skilled customer support team, our machines provide greater longevity and an outstanding return on investment.

- > **Trusted in the industry for over 100 years**
- > **Globally over 100,000 machines in operation**
- > **Bespoke design & engineering consultancy**
- > **Extensive product training**
- > **Preventative maintenance & servicing packages**
- > **Nationwide engineer support**
- > **Financing & part exchange packages**
- > **Fast despatch of spares & accessories**

## Not just machine tools

At Colchester Machine Tool Solutions, we're more than just suppliers of high-quality machine tools – we're your partners in precision engineering.

Our solutions-based approach means we don't settle for "off-the-shelf" solutions. We work closely with you to fully understand your requirements and deliver customised solutions tailored to your workshop's exact specifications. Whether it's integrating specific health and safety features or adapting our machine tools to handle specialised parts and materials, we ensure you get the right machine for the right job.

From design and manufacture to aftercare, our dedication to providing personalised service spans the entire customer journey. Our global customer support network offers quick access to spares and servicing, backed by our team of highly trained, factory-based engineers. Wherever you are in the world, our experienced support staff are ready to respond swiftly and keep your operations running smoothly.

With Colchester, you're not just buying a machine – you're investing in a long-term engineering partner committed to your success.

# Global Reach

Supplying precision manual and CNC machine tools in over 60 countries across four continents. Our extensive global presence ensures that manufacturers worldwide benefit from our industry-leading innovation, tailored support, and the highest standards of precision and reliability.



European Technology Centre in Elland, West Yorkshire.

## Alpha CNC/Manual Combination Lathes

The Alpha XS & XC series offers a comprehensive range of high-performance 2- and 3-axis flat-bed CNC/manual combination centre lathes, designed to provide unmatched versatility for a wide range of machining tasks. These lathes enable operators to switch seamlessly between manual operation for traditional tasks and CNC control for more complex machining operations, making them ideal for diverse production environments.

Equipped with the latest state-of-the-art customised Fanuc CNC control system with 10.4" touch screen, the Alpha X series delivers four distinct modes of operation:

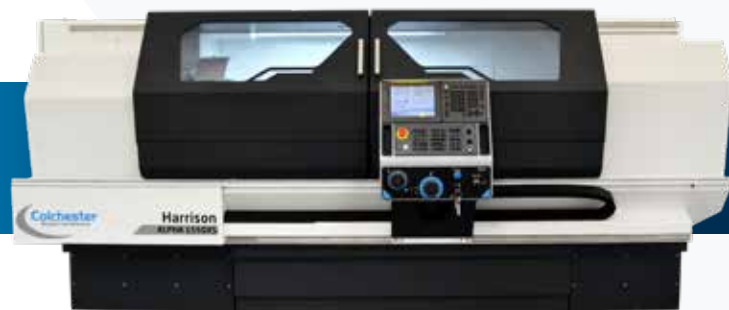
- Manual operation for traditional machining
- Conversational programming for simplified control
- Full automatic CNC operation for complex tasks
- Offline CAD/CAM programming for enhanced precision and efficiency
- This flexibility makes the Alpha XS & XC series the ultimate turning machines, capable of meeting the demands of both precision manual tasks and high-speed CNC operations.



Fanuc Oi-TF Plus With 10.4" Touch Screen

## Alpha XS 2-axis

The Harrison Alpha XS CNC combination lathe range is expertly engineered for fast, high-quality repeatability, ensuring exceptional accuracy and surface finish that meet the exacting standards of toolroom accuracy (DIN 8605). This precision significantly reduces component production costs, making it an ideal solution for manufacturers seeking to optimise their operations.



## Alpha XC 3-axis

Built to toolroom accuracy, the Harrison Alpha XC range incorporates turning with milling, drilling and tapping functionality, reducing the need for second operation production for one-offs and small to medium batches of components.



Integrated Milling Drilling & Tapping Functionality

## Benefits of Alpha XS & XC

- 2- and 3-axis configuration for versatile machining applications
- Seamless transition between manual and CNC operations
- Customised Fanuc CNC control offering four modes of operation
- Ideal for both traditional machining and complex CNC tasks
- Offline CAD/CAM programming for precision and flexibility

Whether for manual or CNC tasks, the Alpha XS & XC series delivers the performance, precision, and versatility needed to handle all your turning requirements with maximum efficiency.

**Full spec table on page 18.**



# MultiTurn CNC/Manual Combination Lathes

The Colchester Multiturn CNC flat-bed centre lathe range is engineered for fast, high-quality repeatability, delivering exceptional accuracy and surface finishes that meet the exacting standards of toolroom accuracy (DIN 8605). This precision significantly reduces component production costs, making it an essential asset for modern manufacturing.

With a flatbed configuration and bed lengths of up to 6 metres, the Multiturn is versatile enough to handle a wide variety of materials, including long shafts, billets, bar stock, and castings. The lathe's hardened and ground bedways, constructed from high-performance cast iron, ensure robust manufacturing and maximum CNC capability.

All Multiturn lathes are equipped with the latest Siemens CNC control system, featuring the integrated ShopTurn conversational programming system, which simplifies operation and programming. This makes the Multiturn ideally suited for one-off and small to medium-sized batch machining.

The Colchester Multiturn XC 3-axis CNC flat-bed lathe range adds further versatility by combining turning with driven tool and C-axis functionality, making it ideal for intricate machining tasks. Additionally, the Multiturn XC MillTurn range incorporates turning, milling, drilling, and tapping capabilities, significantly reducing the need for second-operation production.



## Standard Features

- Siemens 828D CNC control system with 10.4" colour screen
- ShopTurn conversational programming system
- PBI Super Precision 3-Jaw scroll chuck
- Dickson quick change tool post and tool holders
- Automatic slideways and ballscrew lubrication system
- Manual tailstock
- Coolant pump system
- Machine work light
- Roll-out swarf bin
- Easy access to work zone
- Large machining envelope
- Automation ready
- Industry 4.0 ready
- Easy installation

## Optional Features

- Auto indexing tool turret
- Tooling packs
- 3 jaw scroll chuck and 4-jaw independent chuck options
- Parat & Multifix toolpost options
- Swarf conveyor
- Travelling and stationary steady rests
- Hydraulic chucking / tailstock / steady rests
- Extended warranty contracts
- Service / maintenance contracts

**Full spec table on page 19.**

ALPHA	1350XS	1400XS	1460XS	1550XS	1660XS	1760XS
Distance between centres	650mm	1200mm	1500mm	2000 / 3000 / 4000mm	1550 / 2000 / 3000 / 4000 / 5000 / 6000mm	
Swing over bed	350mm	400mm	460mm	554mm	660mm	760mm
Swing in gap	535mm	585mm	730mm	830mm	940mm	1040mm
Gap width from faceplate	165mm	165mm	216mm	216mm	300mm	
Swing over cross-slide	196mm	246mm	270mm	370mm	460mm	560mm
Spindle bore	42mm	55mm	78mm	104mm	104mm	155mm
Spindle nose	D1-4	D1-6	D1-8	D1-11	D1-11 (A2-11)	A2-11
Spindle speeds: Low range	1 to 366rpm	1 to 297rpm	1 to 247rpm	1 to 224rpm	26-224rpm	10-150rpm
Medium range	1 to 1088rpm	1 to 861rpm	1 to 740rpm	1 to 672rpm	225-670rpm	151-490rpm
High range	1 to 3500rpm	1 to 2700rpm	1 to 2200rpm	1 to 2000rpm	670-2000rpm	491-1400rpm
Main motor	7.5kW	7.5kW	11kW	15kW	18.5kW	
Tailstock quill travel	140mm	140mm	180mm	180mm	300mm	
Tailstock quill diameter	63mm	73mm	95mm	95mm	105mm	
Tailstock taper	No. 4 MT	No. 5 MT	No. 6 MT	No. 6 MT	No. 6 MT	
Electrical supply required	22kVA	22kVA	24kVA	24kVA	35kVA	
Overall length	2400mm	2900mm	3600mm	4100 / 5100mm	4200 / 4700 / 5700 / 6700 / 7700 / 8700mm	
Overall width	1700mm	1700mm	2000mm	2000mm	2250mm	
Overall height	1500mm	1500mm	1750mm	1750mm	2260mm	
Overall weight (nett)	1900kg	2370kg	3430kg	3690kg / 4600kg	4300 / 4800 / 6000 / 7200 / 8400 / 9800kg	4500 / 5000 / 6200 / 7400 / 8600 / 10000kg

	1400XC	1550XC	1760XC
Spindle Motor Power	9.5kW	18.5kW	22kW
No. of Tool Stations	8 (all driven)	8 (4 driven)	12
Tooling Type	VDI 20 / DIN 5480	VDI 40 / DIN 1809	VDI 40 / DIN 5482
Max. Power Driven Tool	2.2kW	3.7kW	8kW
Max. Driven Tool Speed	6000 rpm	6000rpm	5000rpm

MULTITURN	1000	2000	3000	4000	5000	6000
Distance between centres	650mm	1200mm	1500mm	2000 / 3000 / 4000mm	1550 / 2000 / 3000 / 4000 / 5000 / 6000mm	
Swing over bed	350mm	400mm	460mm	554mm	660mm	760mm
Swing in gap	535mm	585mm	730mm	830mm	940mm	1040mm
Gap width from faceplate	165mm	165mm	216mm	216mm	300mm	
Swing over cross-slide	196mm	246mm	270mm	370mm	460mm	560mm
Spindle bore	42mm	55mm	78mm	104mm	104mm	155mm
Spindle nose	D1-4	D1-6	D1-8	D1-11	D1-11 (A2-11)	A2-11
Spindle speeds: Low range	1 to 366rpm	1 to 297rpm	1 to 247rpm	1 to 224rpm	26-224rpm	10-150rpm
Medium range	1 to 1088rpm	1 to 861rpm	1 to 740rpm	1 to 672rpm	225-670rpm	151-490rpm
High range	1 to 3500rpm	1 to 2700rpm	1 to 2200rpm	1 to 2000rpm	670-2000rpm	491-1400rpm
Main motor	7kW	7kW	11kW	11kW	17kW	
Tailstock quill travel	140mm	140mm	180mm	180mm	300mm	
Tailstock quill diameter	63mm	73mm	95mm	95mm	105mm	
Tailstock taper	No. 4 MT	No. 5 MT	No. 6 MT	No. 6 MT	No. 6 MT	
Electrical supply required	22kVA	22kVA	24kVA	24kVA	35kVA	
Overall length	2400mm	2900mm	3600mm	4100 / 5100mm	4200 / 4700 / 5700 / 6700 / 7700 / 8700mm	
Overall width	1700mm	1700mm	2000mm	2000mm	2250mm	
Overall height	1500mm	1500mm	1750mm	1750mm	2260mm	
Overall weight (nett)	1900kg	2370kg	3430kg	3690kg / 4600kg	4300 / 4800 / 6000 / 7200 / 8400 / 9800kg	4500 / 5000 / 6200 / 7400 / 8600 / 10000kg

	2000XC	4000XC	6000XC
Spindle Motor Power	7kW	11kW	17kW
No. of Tool Stations	8 (all driven)	8 (4 driven)	12
Tooling Type	VDI 20 / DIN 5480	VDI 40 / DIN 1809	VDI 40 / DIN 5482
Max. Power Driven Tool	2.2kW	3.7kW	8kW
Max. Driven Tool Speed	6000 rpm	6000rpm	5000rpm

# Student CNC Lathe

The compact Colchester Student CNC lathe is expertly designed and engineered in the UK, utilising the same robust construction as the market-leading Colchester Student geared head centre lathe. Equipped with the latest FANUC CNC controls, this lathe provides users with unparalleled flexibility in programming, including ISO, conversational Manual Guide I, or via CAD/CAM interfaces, making it ideal for both educational and industrial applications.

Engineered for fast, high-quality repeatability, the Colchester Student CNC lathe delivers exceptional accuracy and surface finishes that adhere to the exacting standards of toolroom accuracy (DIN 8605). This precision not only enhances the quality of machined components but also significantly reduces production costs, making it a valuable asset in any workshop.

## Standard Features

- FANUC Oi-TF Plus CNC control system with 10.4" colour screen
- Manual Guide I conversational programming system
- Alpha Link CAD/CAM offline programming software
- PBI Super Precision 3-Jaw scroll chuck
- Dickson quick change tool post and tool holders
- Automatic slideways and ballscrew lubrication system
- Manual tailstock
- Coolant pump system
- Machine work light
- Easy access to work zone
- Compact footprint
- Automation ready



Dickson Quick  
Change Toolpost



Fanuc Oi-TF Plus  
with Manual  
Guide i



SPECIFICATION	STUDENT CNC LATHE
Swing Over Bed (mm)	300
Centre Height (mm)	167
Swing Over Cross Slide (mm)	210
Swing In Gap (mm)	480
Distance Between Centres (mm)	1,000
Spindle Nose	(Camlock) D1-4
Spindle Bore (mm)	40
Spindle Speed (rpm)	3,000
Feed Rate (mm)	1-3,000/min
Rapid Traverse (mm)	4,000/min
Motor (kW)	5.5
Floor Space LxWxH (mm)	2,150 x 1,320 x 1,520
Power Supply (400V)	16Kva
Weight (Kgs)	975

# Manual Centre Lathes

Colchester & Harrison manual centre lathes are renowned worldwide for their quality and reliability, built to endure rugged, heavy-duty use. Engineered for longevity, our lathes provide years of outstanding service with minimal maintenance, ensuring that your investment stands the test of time.

Despite their robust construction, all Colchester & Harrison manual lathes excel in delivering fine precision turning, making them suitable for a wide range of machining applications.

Our comprehensive range of lathes is designed with exceptional ease of use in mind. Coupled with a vast selection of optional and ancillary equipment, these lathes guarantee top-of-the-range performance, even for the most complex and challenging tasks.

## Student / M300 & Student VS

The Colchester Student 2500 / Harrison M300 are robust, versatile centre lathes, available as geared head or variable speed spindle drive, these truly are the ultimate training lathes and are the number one lathe for education worldwide.

The Student / M300 lathe has features for easy control of its comprehensive capabilities. It has the power to deal with heavy metal removal, at the same time offering precision for fine tolerance turning.

The Student / M300 is a full-function machine capable of the entire range of turning operations, and through the available range of accessories its scope and versatility can be increased even further. Quality, reliability and longevity make it one of the most outstanding lathes of its kind and is ideally suited for industry, the toolroom, training and secondary and tertiary education applications.



## Master / V350 Triumph / V390

The Colchester Master VS 3250 / Harrison V350 and Colchester Triumph VS 2500 / Harrison V390 are robust, versatile, variable speed centre lathes, renowned for superior performance providing outstanding value for money.

These rugged centre lathes introduce the latest technology to meet the machining requirements of modern tooling. Heavy metal removal and fine precision finishing are accomplished on this superb machine smoothly, quietly, and efficiently. A comprehensive range of accessories are available to further enhance the lathes' scope and versatility. Each variable speed model is fitted as standard with the very latest state of the art ACU-RITE digital readout systems and linear encoders.

ACU-RITE digital readouts (DRO) make your manually-operated machine tools more profitable, improve productivity and raise the quality of the machined workpiece. The large LCD display clearly shows the actual axis positions. The context-sensitive graphical user guidance makes working with ACU-RITE digital readouts a pleasure.

All DRO's have integrated as standard constant surface speed (CSS) control. This powerful feature dramatically increases productivity over conventional centre lathes by automatically controlling the spindle speed during machining.

The standard DRO with integrated CSS functionality allows exactly the right speed for every job so tools perform better, cycle times are optimised and quality greatly improves.



Triumph VS  
/ V390

# Manual Centre Lathes

## Mascot / V460 Mastiff / V550

The Colchester Mascot VS 2000 / Harrison V460 and Colchester Mastiff VS 1800 / Harrison V550 are heavy weight variable speed centre lathes designed and built to withstand rugged, heavy duty machining. All our lathes give years of outstanding service with unrivalled return on investment.

Heavy metal removal and fine precision finishing are at the core of all our centre lathes performance. Our range offers a vast choice of optional accessories and equipment, further enhancing the performance and versatility to tackle even the most complex and challenging machining operations.

Each variable speed model is fitted as standard with the very latest state of the art ACU-RITE digital readout systems and linear encoders.

All DRO's have integrated as standard constant surface speed (CSS) control. This powerful feature dramatically increases productivity over conventional centre lathes by automatically controlling the spindle speed during machining.

The standard DRO with integrated CSS functionality allows exactly the right speed for every job so tools perform better, cycle times are optimised and quality greatly improves.



Mascot VS / V460

## Magnum / V660 Magnum LS / V800

The Colchester Magnum / Harrison V660 manual centre lathe, with an impressive swing capacity of 670mm, is expertly designed to withstand rugged, heavy-duty use, catering specifically to customers in the heavy turning sector. Its counterpart, the Colchester Magnum LS / Harrison V800, boasts an even greater swing capacity of 820mm, making it the ideal choice for larger workpieces.

Renowned for their exceptional quality and reliability, Colchester's heavy-duty centre lathes deliver outstanding service while requiring minimal maintenance throughout their working life. The Magnum and Magnum LS manual centre lathes are built with the power and strength necessary to meet almost any large turning requirement.

These lathes are particularly well-suited for demanding applications in industries such as oil and gas, power generation, utilities, and shipbuilding. Their robust construction and standard production features ensure consistent performance and longevity, making them a valuable asset for any workshop.

### Standard Features

- Infinitely variable spindle speed with integrated digital display
- Spindle power load meter
- 3-Jaw PBI scroll chuck
- Dickson Quick change toolpost with tool holders
- Machine work light
- Coolant pump system
- Machine toolkit
- Thread Dial Indicator
- Roll-out swarf (chip) bin
- Saddle mounted operators control station
- Rapid power traverse of saddle and cross slide movement



Magnum / V660

SPECIFICATION	Student / M300	Master VS / V350	Triumph VS / V390	Mascot VS / V460		Mastiff VS / V550	Magnum / V660	Magnum LS / V800
Height of Centres	167mm	170mm	195mm	230mm		280mm	335mm	412mm
Bed Length Between Centres	635/1000mm	650mm	1200mm	1000/1500/2000mm		1000/1500/2000/3000/4000mm	1500/2000/3000/4000/5000/6000mm	
Swing over Bed	330mm	350mm	400mm	460mm		554mm	670mm	820mm
Swing in Gap	480mm	535mm	585mm	730mm		830mm	910mm	1060mm
Swing over Cross Slide	210mm	196mm	246mm	270mm		370mm	430mm	580mm
Spindle Bore	40mm	42mm	54mm	76mm		104mm	104 / 155mm	104 / 155 / 230mm
Spindle Nose Mounting	D1-4 Camlock	D1-4 Camlock	D1-6 Camlock	D1-8 Camlock		D1-11 Camlock	D1-11 / A2-11	D1-11 / A2-11 / A2-15
Morse Taper in Nose Bush	No. 3 MT	No. 3 MT	No. 4 MT	No. 5 MT		No. 5 MT	No. 6 MT	No. 6 MT
Number of Speed Ranges	12	3 Variable	3 Variable	3 Variable		3 Variable	3 Variable	3 Variable
Range	40-2500rpm	17-3250rpm	14-2500rpm	20-2000rpm		18-1800rpm	18-1800 / 1000 rpm	18-1800/1000/600 rpm
Motor	2.2kW	7.5kW	7.5kW	11kW		11kW	22kW	22kW
Number of Metric Pitches	45	51	51	66		66	59	59
Range of Metric Pitches	0.2 to 14mm	0.2 to 14mm	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	51	51
Range of Imperial Pitches	2 to 56 TPI	2 to 56 TPI	2 to 56 TPI	2 to 84 TPI		2 to 84 TPI	2 to 84 TPI	2 to 84 TPI
Number of Diametral Pitches	18	20	20	27		27	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	8 to 72 TPI	8 to 72 TPI
Number of Module Pitches	18	20	20	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	0.2 to 3.5mm	0.2 to 3.5mm
Width over Bedways	140mm	318mm	318mm	400mm		400mm	480mm	480mm
Travel of Cross Slide	135mm	250mm	250mm	300mm		300mm	406mm	406mm
Travel of Top Slide	90mm	90mm	125mm	195mm		195mm	165mm	165mm
Tailstock Travel	100mm	140mm	140mm	180mm		180mm	300mm	300mm
Taper in Tailstock Barrel	No. 3 MT	No. 4 MT	No. 5 MT	No. 6 MT		No. 6 MT	No. 6 MT	No. 6 MT
Weight (Net)	640 / 720kg	1480kg	1725kg	2730 / 2870 / 3120kg		2820 / 2890 / 3120 / 3700kg	3700 / 4000 / 4700 / 5400kg	4400 / 4900 / 6000 / 7100kg
Dimensions L x W x H	1.68 x .97 x 1.40 2.13 x 1.02 x 1.45	2.03 x 1.35 x 1.65	2.72 x 1.35 x 1.65	2.75 / 3.25 / 3.75 x 1.70 x 2.05		2.75 / 3.25 / 3.75 / 4.75 x 1.70 x 2.10	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 x 1.8 x 1.9

# Large Capacity Heavy Duty Lathes

## Magnum HD

The Colchester Magnum Heavy Duty (HD) has 4 versions based on swing over bed of 880mm, 1010mm, 1135mm and the 1275mm. Manufactured with a one-piece bed, floor type casting, the Magnum HD series of large capacity, high specification manual lathes give more versatility to specialise, ultra heavy duty machining applications.

The high-quality casting construction assures optimum rigidity and stability for years of trouble-free operation. Machines are available in up to 12m distance between centres and are ideal for ultra heavy duty, large capacity applications.

### Standard Features

- One piece bed, floor type casting
- Alloy steel spindle with opposed taper roller bearings
- 2 shear bed way with extra way supporting the apron
- All ways are hardened and ground
- Hardened and ground gears and shafts
- Electromagnetic spindle brake
- 4-way tool post and tool holders
- Manual tailstock with saddle pin body movement
- Coolant pump system
- Machine work light
- 18 speed geared headstock
- Rapid power traverse to saddle, cross slide and top slide



SPECIFICATION	MAGNUM HD 880	MAGNUM HD 1010	MAGNUM HD 1135	MAGNUM HD 1275
<b>CAPACITY</b>				
Centre height	445mm	510mm	575mm	645mm
Swing over bed	880mm	1010mm	1135mm	1275mm
Swing over cross-slide	615mm	745mm	875mm	1015mm
Swing in gap	1340mm	1470mm	1600mm	1740mm
Gap width from headstock	600mm			
Distance between centres	1500 / 2000 / 3000 / 4000 / 5000 / 6000 / 7000 / 8000 / 9000 / 10000 / 11000 / 12000mm			
<b>BED</b>				
Width (w/o aux. guide)	560mm			
Width (w/ aux. guide)	660mm			
<b>CARRIAGE</b>				
Cross slide travel	670mm			
Compound rest travel	450mm			
4-way toolpost width	205mm			
<b>HEADSTOCK</b>				
Spindle motor power	22kW (30kW / 37kW option)			
Spindle bore	154 to 560mm			
Spindle nose	A2-11 to A2-28			
<b>TAILSTOCK</b>				
Quill diameter	115mm			
Quill thread	200mm			
Quill inner taper	MT6			
Bearing surface on bedways	500mm			

# Magnum HD CNC

The Colchester Magnum HD series of large capacity, high-specification CNC lathes are designed with a one-piece bed and floor-type casting, offering superior versatility for specialised turning applications. Available in four versions, the Magnum HD lathes feature swing-over-bed options of 880mm, 1010mm, 1135mm, and 1275mm, providing a broad range of capabilities to suit various machining needs.

Constructed with high-quality castings, the machines ensure optimum rigidity and stability, delivering years of reliable, trouble-free operation. With a maximum 12m distance between centres, the Magnum HD series is perfect for ultra-heavy-duty, large-capacity applications.

For added functionality, the MillTurn option combines turning, milling, drilling, and tapping in one machine, significantly reducing the need for secondary operations and streamlining production.

## Standard Features

- One piece bed, floor type casting
- Alloy steel spindle with opposed taper roller bearings
- FANUC 0i-TF Plus CNC control system with 10.4" colour screen
- Manual Guide I conversational programming system
- 4-way hydraulic tool post and tool holders
- Automatic slideways and ballscrew lubrication system
- Carriage driven tailstock with manual quill movement
- Coolant pump system
- Machine work light
- Rear swarf conveyor with swarf cart
- 4-step auto change variable speed headstock



SPECIFICATION	MAGNUM HD CNC 880	MAGNUM HD CNC 1010	MAGNUM HD CNC 1135	MAGNUM HD CNC 1275
<b>CONTROLLER</b>	Fanuc 0i-TF Plus with Manual Guide i			
<b>CAPACITY</b>				
Centre height	445mm	510mm	575mm	645mm
Swing over bed	880mm	1010mm	1135mm	1275mm
Swing over cross-slide	615mm	745mm	875mm	1015mm
Distance between centres	1500 / 2000 / 3000 / 4000 / 5000 / 6000mm			
<b>BED</b>				
Width	560mm			
<b>CARRIAGE</b>				
Cross slide travel	350mm			
<b>HEADSTOCK</b>				
Spindle motor power	30 / 37kW (37.5 / 45kW option)			
Spindle bore	154 to 420mm			
Spindle nose	A2-11 to A2-28			
<b>TURRET</b>				
Standard toolpost	Hydraulic 4 way toolpost (VDI Disc option)			
No. of tool stations	4 / 8 or 12			
Tool shank cross section	32 x 32mm			
Tool shank diameter max.	63.5mm			
<b>TRAVEL</b>				
Cross Slide (x-axis) travel	630mm			
Longitudinal (z-axis) travel	1500 / 2000 / 3000 / 4000 / 5000 / 6000mm			
Cutting feed rate	X axis: 0.001~250, Z-axis: 0.001~400 mm/rev			
Rapid travel	X-axis: 6, Z-axis: 7.5 m/min			
Ball screw diameter	X-axis: 50, Z-axis: 80mm			
<b>TAILSTOCK</b>				
Quill type	Built-in type, dead tailstock quill			
Quill diameter	145mm			
Quill travel	200mm			

# Support & Service



With over 100,000 machines in operation, our commitment to you extends far beyond the initial purchase. When you invest in our high-quality machine tools, you gain not just a superior product but also access to a dedicated level of service that your investment truly deserves.

From your first interaction with our highly trained sales team to the seamless support provided by our worldwide distribution partners, we are with you every step of the way. Our swift and efficient service and spares department ensures that, in the unlikely event you encounter any issues with your machine tool, we are ready to assist you promptly.

At our European Technology Centre in West Yorkshire, we maintain an extensive stock inventory of over £4 million in spare parts, all designed to minimise your machine downtime. We are proud to offer same-day dispatch on parts, ensuring you can quickly get back to production without unnecessary delays.

Our commitment to after-sales support means that you can operate with confidence, knowing that we are always here to support your business and ensure your machinery runs smoothly.

# Spare Parts



Learn More

Colchester Machine Tool Solutions is the only destination for genuine spare parts for Colchester, T S Harrison and Pratt Burnerd International products.

Whether you are looking for an individual machine component or a technical manual, we stock over £5million spares for our machine tools, lasers & accessories, giving us the ability to service machines up to 30 years old.

Quality is our top priority. All our spare parts are meticulously manufactured and rigorously tested to meet or exceed industry standards, ensuring durability and optimal performance.

Minimise downtime with our prompt and reliable delivery service. We understand the urgency when it comes to spare parts, and our streamlined processes ensure that your order reaches you in the shortest possible time.

Have questions or need assistance in finding the right spare part? Our knowledgeable customer support team is here to help. Contact us via phone, or email, for expert guidance.

**Telephone our hotline on: +44 (0) 1924 412603**

**Email: [spares@colchester.co.uk](mailto:spares@colchester.co.uk)**

# Bespoke Design & Engineering



Learn More

At Colchester Machine Tool Solutions, we understand that the foundation of groundbreaking products lies in impeccable engineering design. Our engineering design services are crafted to transform your ideas into reality, ensuring innovation, precision, and excellence at every step of the process.

Our team of experienced engineers thrives on challenges. We specialise in creating bespoke solutions across our machine tool and laser products, tailored to meet the unique requirements of each customer. From concept to execution, your vision is our blueprint.

We leverage the latest tools and technologies to ensure that your engineering designs not only meet industry standards but also exceed expectations. Our commitment to innovation sets us apart from the competition.

Our diverse team brings together experts from various engineering disciplines. Whether it's mechanical, electrical, or software engineering, we have the knowledge and skills to provide comprehensive solutions for your projects.

Your input is invaluable, and we work closely with you throughout the design process. Regular updates, feedback sessions, and transparent communication ensure that the final product aligns perfectly with your expectations.

# Essential Training



Learn More

Unlock the full potential of your workforce with our bespoke training programs tailored to your exact needs. Explore how our specialised training can enhance skills, productivity, and operational excellence within your business.

We are committed to supporting our range of machine tools in the wider manufacturing industry, whether beginning your career or requiring further knowledge and skills to reduce component manufacturing times. Our machine tool training is not one-size-fits-all. We understand the unique requirements of the manufacturing industry and tailor our programs to address specific challenges, ensuring that your workforce gain skills that directly impact your operational efficiency.

1. Basic Machine Tool Operation: Introduce your team to the fundamentals of machine tool operation, covering safety, basic maintenance, and efficient use of our machine tools.
2. Advanced CNC Programming: Empower your workforce with advanced skills in CNC programming, enabling them to optimise machine performance and adapt to evolving technological trends.
3. Precision Machining Techniques: Master the art of precision machining with specialised training in techniques that enhance accuracy, surface finish, and overall product quality.
4. Maintenance and Troubleshooting: Equip your team with the knowledge to perform routine maintenance and troubleshoot common issues, minimising downtime and maximising machine lifespan.

# Flexible Financing



Learn More

We believe in more than just one-size-fits-all solutions. Our experienced sales team work with you to understand your unique needs, crafting personalised packages that align perfectly with your financial goals. We strive to offer you the best financial solutions without compromising your budget, helping you achieve your goals without unnecessary financial strain.

We can provide assistance to manufacturers looking to finance their capital investment through hire purchase, operating leases, finance leases or refinancing, ensuring that managing your finances is convenient and stress-free.

## Save £££'s with the Full Expensing Scheme

Take advantage of the Government's Full Expensing Scheme and save tax on new investment in qualifying capital equipment from Colchester.

Here is an example of how it could work:

A company incurs expenditure of £1.5m on new state-of-the-art machine Tools from Colchester Machine Tool Solutions. Without the benefit of full expensing, the business would be required to spread the allowances on this investment over multiple years, limiting the immediate deduction available. However, with full expensing, the business is able to deduct the entire £1.5m in the tax year of the purchase.

Assuming the company is subject to the main rate of Corporation Tax, the company stands to save £375,000 in taxes (£1.5m x 25%) in the year 2024 through full expensing. As a result, the company's cash flow is improved and has the opportunity to reinvest the tax savings offered by full expensing into further operational improvements or additional strategic investments.

# Service & Preventative Maintenance Plans



Learn More

We believe that outstanding customer service is the heart of any successful business. Our name has been trusted in the industry for over 100 years. The knowledge and experience we've gained throughout this time is reflected in the longevity and build quality of all Colchester, Harrison and Pratt Burnerd International machine tools & precision work holding equipment.

Our commitment to excellence goes beyond transactions; it's about building lasting relationships with our valued customers. Help is always at hand from our expert team of engineers manning the service helpdesk at our European Technology Centre in West Yorkshire. They are equipped with the knowledge and skills to address your queries and resolve issues efficiently.

Entrust your machinery to the hands of our skilled and experienced field service engineers. Our team possesses deep expertise in machine tool servicing, ensuring that your equipment receives the meticulous attention it deserves.

We understand the value of your time. Our streamlined processes and commitment to efficiency ensure that your concerns are addressed promptly without compromising on the quality of service.

## Reduce your servicing costs with a fixed price **Service Plan**

### Sit back and enjoy the benefits

- Genuine Colchester & Harrison spare parts
- 10% discounted spare parts
- Pay in full or spread the cost over monthly payments
- Fix prices at today's rate to protect against future increases
- Multiple machine discounts available
- Remove the internal burden of maintenance and repairs
- Reduce future unplanned downtime
- Improve safety by keeping machines in good working order
- Help maximise your overall equipment efficiency



	1 Year Plan	3 Year Plan	5 Year Plan
30-point machine health check	✓	✓	✓
Safety functionality check for all interlocks & guards	✓	✓	✓
Screw & slideways backlash adjustment	✓	✓	✓
Headstock & drive assembly inspection	✓	✓	✓
Headstock lubrication functionality test and filter replacement	✓	✓	✓
Machine lubrication functionality test (one shot/slide lube)	✓	✓	✓
Lubrication of all independent points (oil & grease)	✓	✓	✓
Coolant system functionality test	✓	✓	✓
Bed wiper replacement, saddle & tailstock	✓	✓	✓
Back-up battery replacement, control & drives	✓	✓	✓
Work holding safety functionality grip test	✓	✓	✓
Headstock oil change	✗	✗	✓



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