

EUROPA TURNING TO A NEW STANDARD



eturn **EUROPA ENERGY MANAGEMENT TECHNOLOGY** (EEMT) is reducing the hidden, unproductive, non-machining costs faced by machine shops, driving down energy costs and reducing overheads.

- Constantly monitoring the machine, 'EEMT' has the ability to place the lathe into a 'sleep' mode when not used for a predetermined length of time.
- One push of a safety button, and the machine is ready for immediate operation.



For over a generation, the range of EUROPA machines has adorned workshops throughout the UK. Fully supported by one of the UK's leading independent machine tool companies, the EUROPA range has now been expanded...

With an unrivalled knowledge of supplying conventional and manual / CNC lathes, the new EUROPA eturn VS range provides an exceptional, highly specified lathe.

Supplied as a 'ready-to-go' machine, the EUROPA eturn VS range features Eturn Energy Managment Technology that not only reduces running costs, but further enhances the machines longevity.

keep in touch..















Keep up - to - date and current, with the latest in machine tool developments and investments in the industry with the RK International Machne Tools concise Product

Supporting UK Manufacturing since 1951:

TURNING TO A NEW STANDARD: EUROPA eturn VS range of gap bed, conventional lathes

High accuracy and quality of machine build:

Built to the toolmakers accuracy to DIN8605, the range of EUROPA eturn VS lathes comply with latest CE directives and are certified by TUV-Nord.

▶ Electronic variable spindle drive:

Across the range, and allowing the operator to select the optimum turning speed, all models feature a SCHNEIDER frequency inverter. Constant torque is maintained through a Norton type gearbox

Hardended & Ground bed:

Warp resistant, tension free and annealed multi-ribbed gap bed construction. Induction hardened and fine ground bedways for optimum machine life.

► Headstock longevity: NSK heavy duty, taper roller spindle bearings: High precison, NSK taper roller spindle bearings ensure that all the spindles on the EUROPA eturn VS lathes are designed for years of running free turning.

Ideal for toolrooms, industrial production workshops and training establishments, the range of EUROPA eturn VS precision lathes have been specified and tested for todays turning demands.

standard features across the **EUROPA** eturn VS range now include:

- Gap bed on all models
- Electronic variable speed
- Technology (EEMT)
- Built to DIN8605 Toolmakers >

accuracy standard

- Digital display of the spindle rpm.
- Europa eturn Management > Quick Change toolpost and toolholder set
 - Plus...

NEWALL NMS300 2 Axis Digital Readout:

Fitted as standard equipment, NEWALL's NMS 300 Digital Readout System sets the standard for reliability, value and ease of use. IP67 rated encoders and scales make the system impervious to coolant ingress. Store up to 50 tool offsets, switch between metric and imperial and much more...

BISON 3 Jaw Scroll & 4 Jaw Independent chucks: Built on over 65 years of workholding experience, BISON is todays, one of the worlds leading providers of clamping

technology solutions. All BISON chucks supplied as standard equipment on the EUROPA eturn VS range are built to DIN 55029, ISO 702/II standards.

What is EUROPA Eturn ENERGY MANAGEMENT TECHNOLOGY?



How many times have you seen a machine, left under power, but not cutting metal? Motors, pumps and worklights constantly pulling power from your costly electrical supply...

'EEMT' is now standard equipment on all eturn VS lathes and places the machine into a 'sleep mode' when not in operation. The press of a safety button and the machine is instantly ready

You are in complete control with the 'sleep mode' duration, whether its 10minutes or 100 hours!

Gap bed machines allow for the removable gap piece to be removed to allow the swing of larger parts



Providing an increase in the turning swing capacity, the EUROPA eturn VS range of cast iron beds have been designed with a removable gap piece. Also shown and provided as an option, is the micrometre / 4 position turret bed stop (VS330).

Dual dials, right hand apron, feed controls and thread dial indicator:

Across the range of EUROPA eturn VS lathes, right hand aprons are utilised and provides the operator with a more convienent and safer turning position away from the swarf.



With an ultra compact footprint, the EUROPA eturn VS330 is ideal for toolrooms prototype shops and training establishments.



330mm swing over the bed

0mm & 1000mm between centres

- Complies with DIN8605 accuracy standards
- > 330mm dia swing over the bed
- ▶ 510mm dia swing in the gap
- > 750mm or 1000mm distance between centres
- Dual dials on the cross and top slide
- ▶ Longitudinal over travel protection, bed stop
- ▶ Electronic variable spindle speed from 40 to 2500rpm
- eturn VS Energy Management Technology
- ▶ Saddle mounted NEWALL NMS300 2 axis Digital
- Bison 3 Jaw scroll and 4 Jaw independent chucks
- Dixon type quick change toolpost and holders



STANDARD EQUIPMENT INCLUDES:

- > Industry standard, D1-4 camlock spindle nose with 35mm spindle bore
- Heavy duty, precision ground and induction hardened meehanite cast iron bed
- Full length foot brake pedal
- Norton type gearbox for constant power and torque
- Wide-ranging screw cutting options available including, metric, D.P., module and whitworth
- Interlocked, metal chuck guard & high back, rear splash guard
- Travelling saddle chip guard
- Low volt LED worklight
- Covered leadscrew
- Thread dial indicator
- Inspection report and toolkit



EOROPA eturn v 3330 Gap Beu Centre Latrie					
750mm & 1000mm					
165mm					
330mm					
510mm					
190mm					
D1-4 camlock					
40 - 2500rpm					

ELIDODA eturn VS330 Can Red Centre Lath

See pages $10\,\&\,11$ for the full technical specification



Between centres

Centre height

Swing over bed

Swing over cross slide

Variable speed range

Swing in gap

Spindle nose



Exceptional capacity with a small footprint make this model ideal for toolrooms, prototype shops and training establishments.

- ➤ Complies with DIN8605 accuracy standards
- ▶ 360mm dia swing over the bed
- ▶ 560mm dia swing in the gap
- > 750mm or 1000mm distance between centres
- Dual dials on the cross and top slide
- ▶ Longitudinal over travel protection, bed stop
- ▶ Electronic variable spindle speed from 35 to 2500rpm
- eturn VS Energy Management Technology
- ▶ Saddle mounted NEWALL NMS300 2 axis Digital Readout
- ▶ Bison 3 Jaw scroll and 4 Jaw independent chucks
- Dixon type quick change toolpost and holders

STANDARD EQUIPMENT INCLUDES:

- > Largest in class, D1-5 camlock spindle nose with 42mm spindle bore
- > Heavy duty, precision ground and induction hardened meehanite cast iron bed
- > Full length foot brake pedal
- > Norton type gearbox for constant power and torque
- > Wide-ranging screw cutting options available including, metric, D.P., module and whitworth
- Interlocked, metal chuck guard & high back, rear splash guard
- > Travelling saddle chip guard
- > Low volt LED worklight
- > Covered leadscrew
- > Thread dial indicator
- > Inspection report and toolkit



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SCAN ME

Off the shelf, commonly available electronic components



You will find a number of Schneider electrical componets in every EUROPA eturn VS lathe. Including the frequency inverter for variable speed and the electrical braking device.

The widest range of increased productivity options available:

EUROPA eturn VS lathes are only available as Gap Bed models allowing for an increased turning capacity. An over travel protection device is fitted to the longitudinal axis. Image shows the optional micrometre bed stop and 5 position turret.



EUROPA Eturn Energy Management Technology is equipped as standard and is your new silent partner in reducing the hidden, unproductive, non-machining costs faced by workshops and is designed to drive down energy costs.



	EUROPA eturn VS360 Gap Bed Centre Lathe
Between centres	750mm & 1000mm
Centre height	178mm
Swing over bed	360mm
Swing in gap	560mm
Swing over cross slide	215mm
Spindle nose	D1-5 camlock
Variable speed range	35 - 2500rpm

See pages 10 & 11 for the full technical specification

Dixon style Quick Change Toolposts are fitted as standard equipment: Enhanced options include



PARAT Toolpost and toolholder options.

This user-friendly and renowned tooling system, known for its accuracy, offers 0.005mm swivel tolreance across its 4 tool locations.

Heavy duty NSK Spindle taper roller spindle bearings, and a heavy duty Norton type gearbox.

Each headstock and spindle is thoroughly tested and tested even before machine assembly. The sturdy headstock with its hardened and ground precision bearing gears complete with oil circulation lubrication system.



One of the most popular work envelopes on a lathe you will find and found in workshops of all capacities, the EUROPA eturn VS390 series is an engineering workhorse!



- ► Complies with DIN8605 accuracy standards
- > 390mm dia swing over the bed
- ▶ 610mm dia swing in the gap
- ▶ 760mm, 1000mm or 1250mm distance between centres
- Dual dials on the cross and top slide
- ▶ Longitudinal over travel protection, bed stop
- ▶ Electronic variable spindle speed from 20 to 2500rpm
- eturn VS Energy Management Technology
- Saddle mounted NEWALL NMS300 2 axis Digital Readout
- ▶ Bison 3 Jaw scroll and 4 Jaw independent chucks
- Dixon type quick change toolpost and holders

We have all been in workshops, and noticed the machine in the corner, pumps running, motor running, coolant flowing etc. Often left for hours, this machine is consuming power. EEMT allows you to set a predetermind period before the machine enters a 'sleep mode.' One press of a safety button and the machine is ready for operation.



STANDARD EQUIPMENT INCLUDES:

- Industry standard, D1-6 camlock spindle nose with 54mm spindle bore
- Heavy duty, precision ground and induction hardened meehanite cast iron bed
- Electro-magnetic braking system
- > Norton type gearbox for constant power and torque
- Wide-ranging screw cutting options available including, metric, D.P., module and whitworth
- > Interlocked, metal chuck guard & high back, rear splash guard
- > Travelling saddle chip guard
- > Low volt LED worklight
- > Covered leadscrew
- > Thread dial indicator
- > Inspection report and



See pages 10 & 11 for the full technical specification

Between centres

Centre height

Swing in gap

Spindle nose

Swing over bed

Swing over cross slide

Variable speed range

EUROPA eturn VS390 Gap Bed Centre Lathe

760mm, 1000mm and 1250mm

190mm 390mm

610mm

240mm D1-6 camlock

20 - 2500rpm





Pturn VS560

For when demanding workpieces that require a larger capacity machine, the EUROPA eturn VS460, VS510 and VS560 utilse all the same characteristics, but are available with three different centre heights to allow swing over bed capacities from 460mm, 510mm and 560mm diameters.

Distance between centres range from 950mm for shorter, larger diameter parts to be turned on a small footprint machine, through to 2950mm between centres.

- ▶ Complies with DIN8605 accuracy standards
- ▶ 460mm, 510mm and 560mm dia swing over the bed
- > 710mm, 760mm and 810mm dia swing in the gap
- ▶ 950mm to 2950mm distance between centres
- → Joy stick controlled power rapid and feed control on the apron for longitudinal travel
- > Dual dials on the cross and top slide
- ▶ Longitudinal over travel protection
- ▶ Electronic variable spindle speed from 20 to 2000rpm
- eturn VS Energy Management Technology
- ▶ Travelling pendant mounted NEWALL NMS300 2 axis Digital Readout
- ▶ Bison 3 Jaw scroll and 4 Jaw independent chucks
- Dixon type quick change toolpost and holders

Right hand apron controls provides even more operator protection from the swarf removal area



For the opposite reason of the Digital Reading being in-line with the operator; a right-hand apron takes the operators hands away from the potential danger area of hot swarf being turned and then pouring onto the handwheel.

Saddle mounted Newall NMS300 2 axis Digital Readout and travelling saddle guard.



Designed with the operator in mind: Having the DRO in 'line-of sight' with the cutting tool makes sense! Further protection is gained for the operator behind a travelling saddle guard with viewing window.

The Tailstock: Often overlooked, but the tailstcok carries out many important tasks.

Heavy duty headstocks feature across the EUROPA VS range. Large diameter quills & equipped with large Morse Tapers, the Tailstock undertakes drilling & work support operations.



Safety critical: Across the EUROPA eturn VS range you will find additional safety features included.

Along with DIN accuracy standards assured, every EUROPA eturn VS lathe exceeds the CE conformity for European Directive 2006/42/EC and EMC 2014/30/EU. Testing is undertaken by TUV NORD & includes UKCA compliance.



STANDARD EQUIPMENT INCLUDES:

- > Largest in class, D1-8 camlock spindle nose with 80mm spindle bore
- > Heavy duty, precision ground and induction hardened meehanite cast iron bed
- > Electro-magnetic braking system
- > Norton type gearbox for constant power and torque
- > Wide-ranging screw cutting options available including, metric, D.P., module and whitworth
- Interlocked, metal chuck guard & high back, rear splash guard
- > Travelling saddle chip guard
- > Low volt LED worklight
- > Covered leadscrew
- > Thread dial indicator
- > Inspection report and toolkit





INCREASE PRODUCTION WITH ROMI C SERIES FLATBED ELECTRONIC CNC LATHES:

From the compact ROMI C420 to the heayweight C1000 and above, the ROMI C Series of 2 and 3 axis models enhance any workshop and really start to show their advantages on repetitive work with lower batch quantities.



Using the most popular and globally recognised SIEMENS CNC control, operators are familiar with the machines programming and operation. For those who prefer to program 'conversationally' ShopTurn software is available. Options available include automatic production turrets and hydraulic chucks and programmable steady rests. For more information, call +44(0) 1322 447611.



	EUROPA eturn VS460 Gap Bed Centre Lathe	EUROPA eturn VS510 Gap Bed Centre Lathe	EUROPA eturn VS560 Gap Bed Centre Lathe			
Between centres	950mm / 1450mm / 1950mm / 2950mm	950mm / 1450mm / 1950mm / 2950mm	950mm / 1450mm / 1950mm / 2950mm			
Centre height	228mm	254mm	280mm			
Swing over bed	460mm	510mm	560mm			
Swing in gap	710mm	760mm	810mm			
Swing over cross slide	290mm	340mm	390mm			
Spindle nose	D1-8 camlock	D1-8 camlock	D1-8 camlock			
Variable speed range	20 - 2000rpm	20 - 2000rpm	20 - 2000rpm			

See pages 8 & 9 for the full technical specification



	EUROPA eturn VS330 EUROPA eturn VS360 EUROPA eturn VS390		EUROPA eturn VS460	EUROPA eturn VS510	EUROPA eturn VS560	
CAPACITIES:						
Distance between centres	750mm / 1000mm	750 mm / 1000mm	760mm / 1000mm 1250mm	950mm / 1450mm 1950mm / 2950mm		
Centre height	165mm	178mm	190mm	228mm	254mm	280mm
Swing over bed	330mm	360mm	390mm	460mm	510mm	560mm
Swing in the gap	510mm	560mm	610mm	710mm	760mm	810mm
Swing over cross-slide	190mm	215mm	240mm	290mm	340mm	390mm
Gap width in front of faceplate	150mm	150mm	150mm	220mm	220mm	220mm
Cross-slide travel	145mm	195mm	230mm	265mm	265mm	265mm
Top slide travel	95mm	100mm	120mm	130mm	130mm	130mm
Width of bed	185mm	250mm	270mm	345mm	345mm	345mm
MAIN SPINDLE:						
Spindle nose	D1-4 camlock	D1-5 camlock	D1-6 camlock	D1-8 camlock	D1-8 camlock	D1-8 camlock
Spindle bore	35mm	42mm	54mm	80mm	80mm	80mm
Variable speed - gear ranges	2	2	3	3	3	3
Variable speed - range (rpm)	40 - 2500rpm	35 - 2500rpm	20 - 2500rpm	20 - 2000rpm	20 - 2000rpm	20 - 2000rpm
Spindle nose - bush	MT #4	MT #5	MT #6	MT #7	MT #7	MT #7
Spindle nose - centres	MT #3	MT #3	MT #4	MT #5	MT #5	MT #5
TAILSTOCK:						
Tailstock quill travel	100mm	120mm	155mm	180mm	180mm	180mm
Tailstock quill diameter	40mm	50mm	58.5mm	75mm	75mm	75mm
Tailstock taper	MT #3	MT #3	MT #4	MT #5	MT #5	MT #5
SCREWCUTTING:						
No. of metric threads	44	27	39	39	39	39
Range of metric threads	0.2mm to 14.0mm	0.4mm to 7.0mm	0.2mm to 14.0mm	0.2mm to 14.0mm	0.2mm to 14.0mm	0.2mm to 14.0mm
No. of whitworth threads	47	36	45	45	45	45
Range of whitworth threads	4 - 144 TPI	4 - 72 TPI	2 - 72 TPI	2 - 72 TPI	2 - 72 TPI	2 - 72 TPI
No. of diametral pitch (DP) threads	30	21	21	21	21	21
Range of diametral pitch (DP) threads	4 - 44 DP	8 - 44 DP	8 - 44 DP	8 - 44 DP	8 - 44 DP	8 - 44 DP
No. of module pitch threads	24	18	18	18	18	18
Range of module pitch threads	0.3 - 3.5mm	0.3 - 3.5mm	0.3 - 3.5mm	0.3 - 3.5mm	0.3 - 3.5mm	0.3 - 3.5mm
FEED RANGE:						
Longitudinal feeds / rev	0.02 - 1.040mm	0.030mm - 0.400mm	0.040mm - 1.000mm	0.040mm - 1.000mm	0.040mm - 1.000mm	0.040mm - 1.000mm
Cross feeds / rev	0.006 - 0.340mm	0.010mm - 0.130mm	0.020mm - 0.500mm	0.020mm - 0.500mm	0.020mm - 0.500mm	0.020mm - 0.500mm
DRIVE MOTORS:						
Variable speed drive motor	2.25kW	3.75kW	7.5kW	11.25kW	11.25kW	11.25kW
DIMENSIONS: detailed floorplans available on request						
Machine length	1640 - 1900mm	1860 - 2114mm	2010 / 2250 / 2500mm		2452 / 2960 / 3468 / 4468mm	
x width	x 830mm	x 920mm	x 1040mm	1	x 1150mm	
Machine height	1500mm	1540mm	1570mm	1715mm	1715mm	1715mm
Net weight (approx)	620kg / 670kg	850kg / 900kg	1000kg - 1300kg	1800kg - 3300kg	2000kg - 3500kg	2200kg - 3700kg



Tel:

	EUROPA eturn VS330	EUROPA eturn VS360	EUROPA eturn VS390	EUROPA eturn VS460	EUROPA eturn VS510	EUROPA eturn VS560
What is standard equipment with my EUROPA eturn VS lathe?						
BISON 3 Jaw scroll chuck	160mm	200mm	250mm	315mm	315mm	315mm
BISON 4 Jaw independent chuck	200mm	200mm	250mm	315mm	315mm	315mm
Spindle nose mount	D1-4	D1-5	D1-6	D1-8	D1-8	D1-8
Quick change toolpost	✓	✓	✓	✓	✓	✓
c/w No of toolholders	5	6	6	6	6	6
2 Axis Newall NMS300 Digital Deadout	✓	✓	✓	✓	✓	✓
EUROPA energy saving EEMT feature	✓	✓	✓	✓	✓	✓
Dual, metric/imperial dials to Top slide	✓	✓	✓	✓	✓	✓
Dual, metric/imperial dials to Cross slide	✓	✓	✓	✓	✓	✓
Gap bed construction	✓	✓	✓	✓	✓	✓
Induction hardened and ground bed	✓	✓	✓	✓	✓	✓
Conforms to CE 13849	✓	✓	✓	✓	✓	✓
Built to DIN 8605 Toolroom standard	✓	✓	✓	✓	✓	✓
SCHNEIDER Inverter controlled, variable speed spindle	✓	✓	✓	✓	✓	✓
Travelling saddle mounted mounted DRO	✓	✓	✓	✓	✓	✓
Travelling saddle mounted chip guard	✓	✓	✓	✓	✓	✓
Over travel longitudinal protection device	✓	✓	✓	✓	✓	✓
LED strip worklight	✓	✓	✓	✓	✓	✓
High backed, machine enclosure for safety	✓	✓	✓	✓	✓	✓
End of machine safety emergency stop	✓	✓	✓	✓	✓	✓
Travelling saddle mounted operator controls	✓	✓	✓	✓	✓	✓
Right hand apron handwheel	✓	✓	✓	✓	✓	✓
Universal screwcutting gearbox	✓	✓	✓	✓	✓	✓
Thread dial indicator	✓	✓	✓	✓	✓	✓
Joystick control rapid power to longitudinal travel	n/a	n/a	n/a	✓	✓	✓
Joystick control rapid power to cross travel	n/a	n/a	n/a	n/a	n/a	n/a

Optional equipment and accessories to further enhance your EUROPA eturn VS lathe:

The EUROPA eturn VS range already out performs machines with its unrivalled base machine specification. There are a few other production enhancements that you can consider to provide new levels of turning capability.



Taper Turning Attachment:

There are four traditional ways to turn a taper on a lathe. The taper turning attachment is the most reliable method to undertake this operation and can perform, internal or external

Attaching to the bed of the lathe, you set the angle on the attachment and the cross slide moves as the saddle travels down the bed.

Collet chuck:

Fast and easy collet swap over, the 5C collet chuck is a proven workholding solution. Clamping via a scroll ensures that the clamping pressure is applied uniform and the workpiece is distortion free.







PARAT Toolpost and toolholding system:

The PARAT 4 way toolpost is often referred to as the most accurate of toolposts. Providing high repeatability when indexing, and accurate to 0.005mm, you will find the PARAT toolpost eliminates measuring once indexed. With recogniseable location points at 90degs, you will also notice a further 40 location points at 9deg intervals. Less measuring - less intervention = greater effeciency.

Turning, boring, drilling tooling packages:

With tooling packages available across the EUROPA eturn VS range, you can find high performance carbide inserts, tool holders for external machining from KENNAMETAL.

Also available are a range of general purpose HSS centre drills and jobbing drills to suit the most typical of workshop turning requirements.





LISTA Tool Storage and racking:

Securing your workholding and ancillary equipment.

LISTA sheet steel drawer cabinets offer made-to-measure top quality for professional use. Materials and work guarantee trouble-free Installation and use, and maintain the value of your expensive inventories. The drawer cabinets come with a load-bearing capacity of 75 kg or 200 kg per drawer and so offer even greater flexibility for each type of inventory.

Also available:

- **Faceplates**
- Travelling steadies
- Stationary steadies
- Multi position turret bedstop with micrometre
- and parting off tools
- Rotating tailstock centres
- Tailstock mounted drill chuck and Lifting frame for the machine
- Additional quick change toolholders

 Inspection equipment including micrometres, vernier calipers and measuring toolsets

RK International Machine Tools Ltd

A COMPLETE RANGE OF MACHINE TOOLS

LATHES | MILLS | SAWING GRINDING | THREAD ROLLING

For over 30 years, the range of EUROPA machines have been supplied and supported in the UK by RK International Machine Tools Limited.

Established in 1951, RK International, a family run company, has always taken great pride in providing equipment that proves to be reliable, can be fully supported for many years and will be of benefit to any workshop environment.

EUROPA MILLING:

- ▶ From the toolroom and workshop ever popular EUROPA Milltech 2000VS Turret Milling Machine with R8 spindle, the heavier duty, EUROPA Milltech 5000VS with ISO.40 taper and square ways.
- ► EUROPA BVS Bed type milling machines for heavier work loads and inverter controlled variable speed
- ► The Toolroom heavyweight: EUROPA CENTURION with a ISO.50 taper, bi-rotative head and offers a 1800kg table load
- ► Need a Turret mill and a Horizontal mill? The EUROPA 6VHS provides this versatility
- Also available, CNC Models with FANUC controls





EUROPA JAINNHER CENTRELESS GRINDING

- ▶ Since the 1990's EUROPA JAINNHER centeless grinding machines have been installed in the UK's leading grinding OEM machines shops where tight tolerance, high surface parts are required
- Upto 150mm diameter components can either be plunge or through feed ground
- Manual, PLC and CNC models are available
- Automation systems are often fitted and range from a traditional hopper system with parts being fed on a conveyor, through to CNC systems with robot load / unload

EUROPA MEGA THREAD ROLLING

- Have you ever considered Thread Rolling?
 - > Upto 20% stornger thread form over traditional thread cutting
 - > Greater tensile and shear strength and resistance to wear
 - > Increased component accuracies
 - Shorter cycle time and chipless machining
 - > Improved surface finish
- Components can be through feed or plunge (in-feed), ranging from 2mm to 150mm pitch and providing rolling pressures of up to 120ton.
- Manual and CNC models available including automation



more information? call +44 (0)1322 447611



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