



QUICKNESS AND VERSATILITY

CNC SCREWCUTTING MACHINES

MODELS: DEBA 16 / 26



DEBA: PRECISION + RELIABILITY + ERGONOMY + FLEXIBILITY

DESCRIPTION

This CNC multislides automatic lathe has a bar capacity up to 16 / 26 mm. This belongs to a new machine concept focused on the machining of very simple parts with the simplest control in the marketplace, the exclusive MUPEM control.

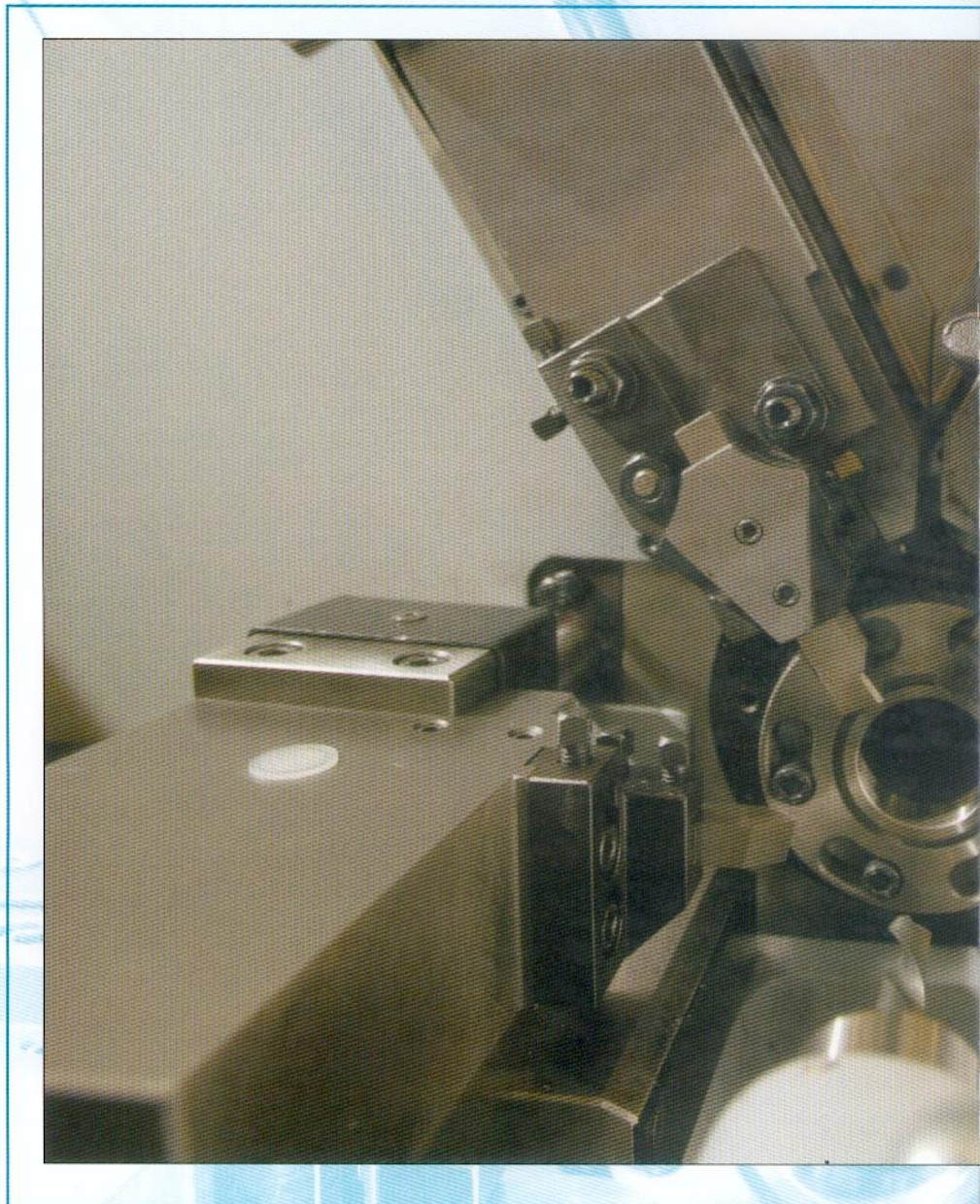
Starting from the ground machine, you may fit this lathe with a wide range of options according to the part to be machined.

Its simple programming system, without needing any cam, its ergonomic design and its 0,001 resolution along with its high precision makes the DEBA model the ideal machine for those parts that do not need any complex mechanics or electronics.

RADIAL SLIDES

Around the main spindle we may fit up to 4 radial slides CNC controlled able to work independently or simultaneously with a resolution of 0,001 mm. On the front horizontal slide, a cross slide may be fitted in order to make longitudinal turnings, cylindrical and conical threads.

On the rear horizontal slide, a very usefull polygonal turning / thread millings device may be fitted.



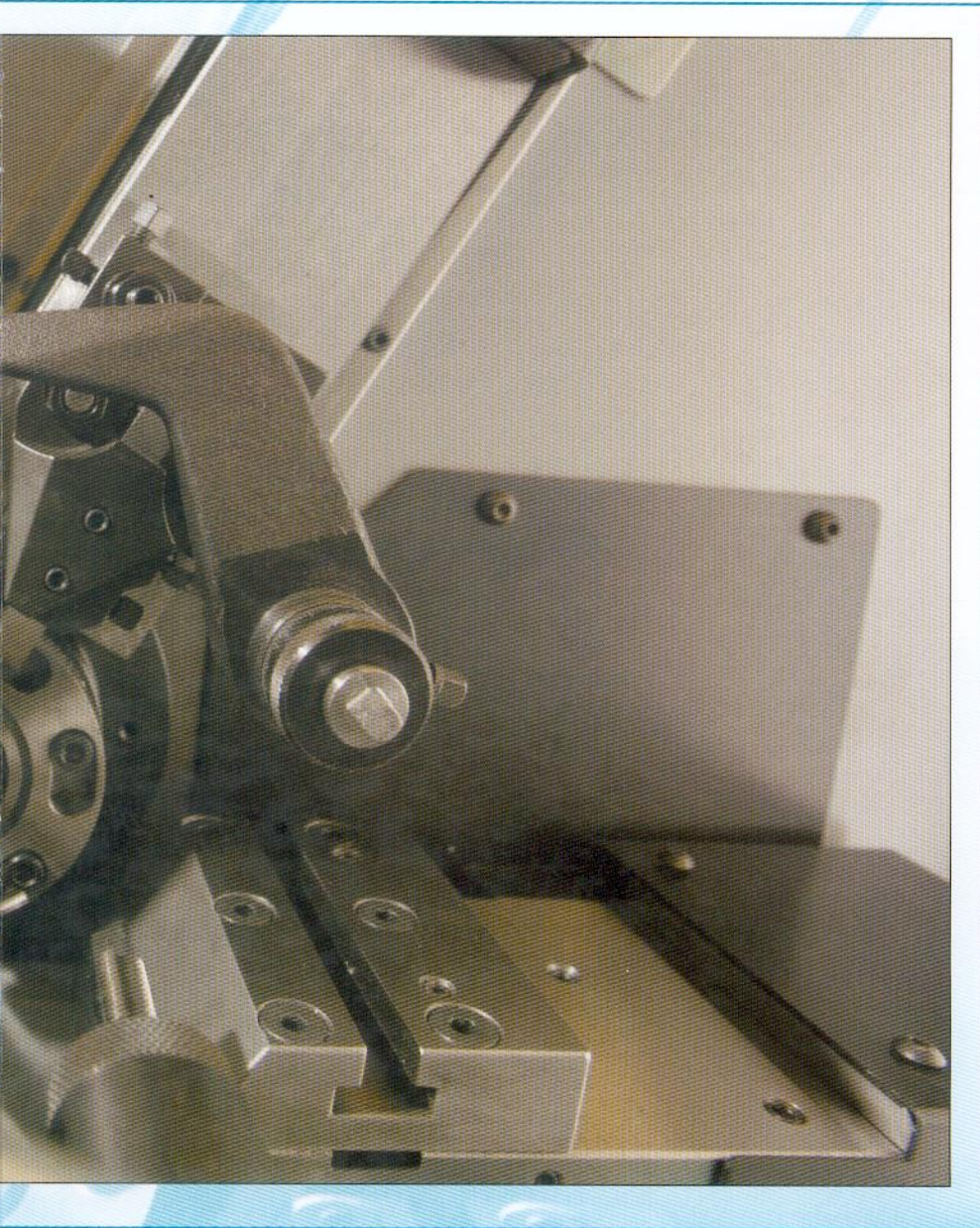
CONTROL

- Industrial PC based control with 20GB hard drive and 3^{1/2}" floppy disc, including the exclusive MUPEM programming system.
- 6^{1/2}" LCD color screen for program edition.

MAIN SPINDLE

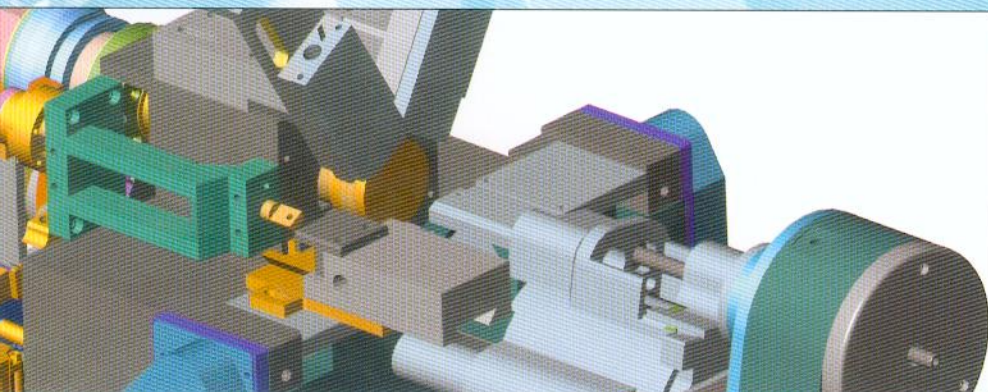
The DEBA model has a simple mechanical collet clamping system. The spindle itself is built with a high rigidity and spins over oblique coupled high precision bearings, greased for life.

Collets are DIN 6343 as a standard, but any other clamping system may be used on request.



STANDARD EQUIPMENT

- CNC programming system.
- Slides and tailstock guides are tempered, grinded and lapped.
- Main spindle 2,2 kW AC operations.
- Tempered main spindle, grinded and mounted on angular contact ultra precision bearings and quick collet changing for 26 and 36 capacity models.
- Main spindle operated by an A.C. motor with continuous speed variation by the means of a manual potentiometer and RPMs display.
- 2 horizontal slides (front and rear) CNC controlled without toolholders.
- Auxiliary bar stopper.
- Mechanical collet clamping system for DIN 6343 collets.
- Automatic lubricating system.
- Antisplash covers complying with CE norms.
- Cooling system with removable electropump.
- Light for the working area.



OPTIONAL ATTACHMENTS



VERTICAL SLIDES

Above the main spindle, we may fit one or two vertical slides at 60°, extremely rigid thanks to the guides system.

Feed rate and movement along the "X" axis is totally CNC controlled. 45 mm axial adjustments by the means of a micrometric screw.

Both slides may work independently or simultaneously with any other device on the machine.

DRILLING AND TAPPING DEVICE

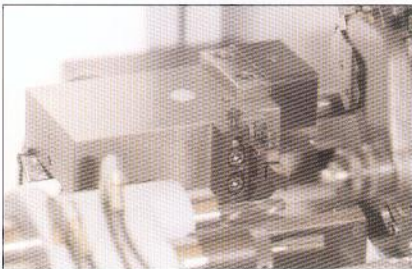
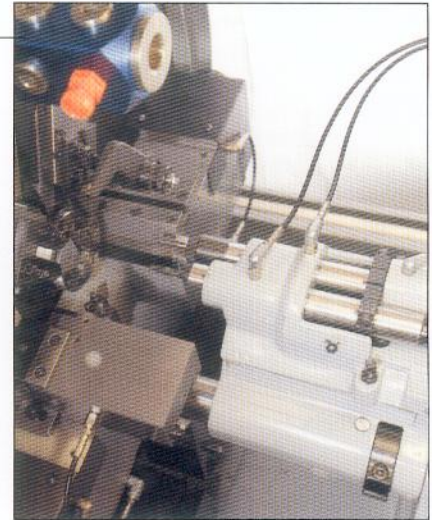
Optionally, when the part needs to be drilled and tapped, we may fit as a special attachment, a combined drilling and tapping device working by differential system.

With this attachment, either right hand threads or left hand threads, internal and external may be achieved.

These threading operations may be achieved simultaneously with

any other radial operation since the main spindle doesn't need to be stopped or inverted, being a very productive system.

It is also possible to make a double drilling by fitting a drilling spindle instead of the tapping one. Even quick drillings are allowed only by inverting the sense of the drilling spindle.



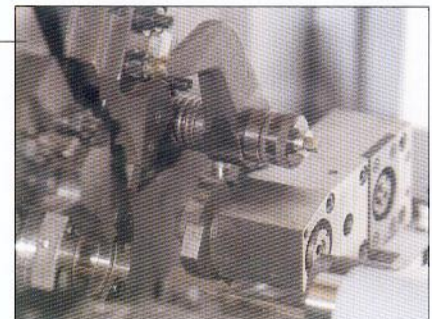
CROSS SLIDE FOR AXIAL TURNING

On the front horizontal slide, a CNC controlled cross slide may be fitted in order to achieve any kind of turned geometries by interpolating both radial and axial axis.

POLYGONAL TURNING / THREADS MILLING DEVICE

Only by swapping a couple of gears, this device allows both polygonal turnings and threads millings.

This device is operated straight away from the main spindle by the means of a gear box and articulated cardan transmission.





TECHNICAL FEATURES

TECHNICAL FEATURES	DEBA 16	DEBA 26
HEADSTOCK		
MAX. ROUND BAR CAPACITY WITH DIN 6343 COLLETS (Ø MM)	16	26
MAIN SPINDLE OPERATIONS		
POWER (100% ED) (KW)	4	4
SPEED RANGE (RPM)	500 / 8500	350 / 6000
HORIZONTAL SLIDES		
MAX. RADIAL STROKE (X AXIS) (MM)	35	35
MAX. FEED FORCE (100% ED) (N)	2450	2450
RAPID TRAVERSE (M/MIN)	15	15
VERTICAL SLIDES		
MAX. RADIAL STROKE (X AXIS) (MM)	35	35
MAX. FEED FORCE (100% ED) (N)	2450	2450
RAPID TRAVERSE (M/MIN)	15	15
AXIAL MANUAL ADJUSTMENT (MM)	30	30
FRONT TOOLS OPERATION (OPTION)		
MAX. AXIAL STROKE (MM)	100	100
MAX. FEED FORCE (100% ED) (N)	1630	1630
RAPID TRAVERSE (M/MIN)	15	15
LONGITUDINAL TURNING SLIDE (OPTION)		
MAX. AXIAL STROKE (MM)	70	70
MAX. FEED FORCE (100% ED) (N)	2450	2450
RAPID TRAVERSE (M/MIN)	15	15
DOUBLE FRONT DRILLING DEVICE (OPTION)		
MAX. AXIAL STROKE (MM)	45	45
MAX. FEED FORCE (100% ED) (N)	1630	1630
RAPID TRAVERSE (M/MIN)	15	15
FRONT DRILLING AND DIFFERENTIAL TAPPING DEVICE (OPTION)		
MAX. AXIAL STROKE (MM)	45	45
MAX. FEED FORCE (100% ED) (N)	1630	1630
RAPID TRAVERSE (M/MIN)	15	15
A.C. OPERATIONS POWER (KW)	2,2	2,2
SPEED RANGE (RPM)	350 / 6000	350 / 6000
TAPPING CAPACITY (MÉTRICA)	- F-212 M10	M10
	- BRASS M12	M12
AXIS PRECISION		
POSITIONING PRÉCISION (MM)	±0,005	±0,005
POSITIONING REPEATABILITY (MM)	±0,002	±0,002
COOLING SYSTEM		
FLOW (LTR/MIN)	30	30
PRESSURE (BAR)	1,5	1,5
TANK CAPACITY (LTR)	80	80
MAIN DIMENSIONS		
SPINDLE'S CENTRE HEIGHT ABOVE THE GROUND (MM)	1.120	1.120
REQUIRED AREA (WITHOUT SWARF CONVEYOR) (MM)	1.800X1.050	1.800X1.050
TOTAL HEIGHT (MM)	1.600	1.600
APPROX. WEIGHT (KG)	1.300	1.300

ADDITIONAL OPTIONAL DEVICES

- One vertical slide CNC controlled
- Second vertical slide CNC controlled
- CNC cross slide for 70 mm axial turning
- Simple cross slide, only for cylindrical turnings, operated by the tailstock on the front slide
- Simple cross slide, only for cylindrical turnings, operated by the tailstock on the rear slide
- CNC controlled tailstock with 120 mm axial stroke
- CNC Front double drilling device with 45 mm max. stroke
- CNC drilling and differential tapping device
- Cridan threading device on the rear slide
- Part catcher
- Polygonal turning / threads milling device
- Quick drilling device
- Vectorial AC operations



MANUFACTURING RANGE



OMEGA

CURRENT MACHINES RANGE

- CNC MULTISLIDES AUTOMATIC LATHES
- AUTOMATIC BAR FEEDERS
- HANDLING SYSTEMS
- AUTOMATIC LATHES
- MULTISPINDLE LATHES
- CNC LATHES



TWIN



MIKRA



SUPRA



DEBA

These technical specifications may vary without notice due to our continuous improvement policy.



MAGNA



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