A 15/25

A 15/25 E

TB 42/60

TB 42/60 E

TD 26/36

Cam Controlled Automatic Lathes

ergomat

For cost per part, Cam Controlled Automatic Lathes are unbeatable.

High performance in turning operations grant the most economic production of medium and large batches.
These are strong arguments for the Cam Controlled Automatic Lathes, even in the age of the CNC.

Cost per part is the formula to calculate return on your investment, and the high production you achieve with Ergomat Cam Controlled Single Spindle Automatic Lathes.

They are compact, specifically designed for high production and equipped to meet your needs.

When producing middle or large sized batches, of simple or complex parts, Ergomat Cam Controlled Automatic Lathes will fully exceed your expectations.
Technical parts, machined from bars with diameter below 3mm (1/8") up to 60mm (2 3/8"), tubing material up to 80mm (3 1/8"); plus blanked or molded slugs are economically machined on Ergomat Cam Controlled Automatic Lathes.

Simultaneous operations permit machining with fast cycle times.

Some of the strong arguments for Ergomat Cam Controlled Single Spindle Automatic Lathes:

- Cost per part is extremely favorable
- Precision machining
- Sturdy construction
- Easy maintenance
- Fast cycle times

The modular system of its construction makes the machine extremely versatile – Ergomat Cam Controlled Automatic Lathes allow to be equipped with a large selection of accessories, beginning with a simple tailstock, four or six position turret, gear box, live tooling, synchronized counter spindle and more. Automatic bar loading systems or magazine feeders for blanks can automate your production.

Design, high quality components, and Ergomat's extensive know-how grant high pattern quality, which is confirmed by the more than 80,000 Cam Controlled Automatic Lathes built with this technology– most of them still in operation.

All Ergomat Cam Controlled Automatic Lathes have been designed for easy, secure and economical operation.

A 15/25

Unbeatable in low cost job running

Sales champion

Every parts manufacturer knows, that in spite of the technological evolution and CNC application in machine tools, a large number of turned parts are still best manufactured on Cam Controlled Automatic Lathes.
For this reason, and due to the A 15's and A 25's proven quality and reliability, they continue being popular for almost 60 years.

Application

Single Spindle A 15 and A 25 Cam Controlled Automatic Lathes are designed for the manufacturing of turned parts with a diameter up to 15 mm (5/8") or 25 mm (1") and are appropriate for the most diverse applications.
The simple design concept of these machines permits fast set-ups, favoring the manufacturing of parts in smaller batches.

Bar Stop

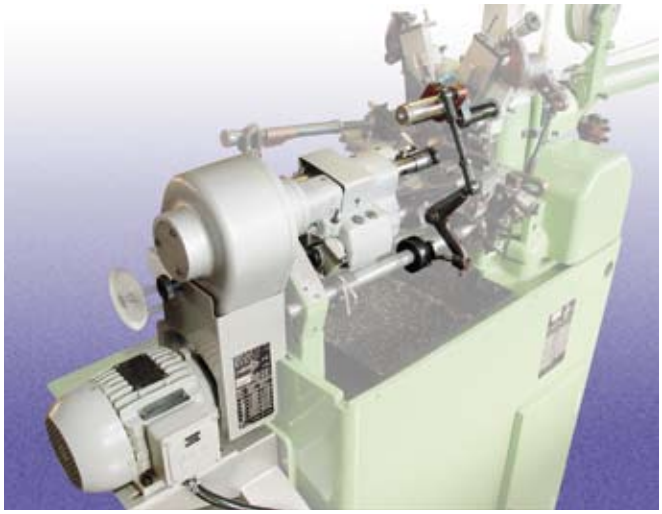
Options

In their basic configuration, both A 15 and A 25 are equipped with tailstock and quill, four cross slides, acrylic protection cover and a weight operated bar feeder.
For different applications, there are a number of accessories available:

- Drilling and threading attachment
- Double drilling attachment
- Four position turret
- Four position turret and gear box for spindle reversing
- Thread milling attachment
- Polygonal turning attachment
- Front and rear single point turning attachment
- Synchronized sub-spindle

Drilling and threading attachment (BGSE)

This attachment, and also the threading attachment (GSE), enable threading and tapping operations without spindle reversion.



Drilling and threading attachment (BGSE) with swing stop.

TD 26/36

Designed for sophisticated jobs

Concept

The advantage of the TD Cam Controlled Automatic Lathe is the basic design concept that was developed specifically for the manufacturing of complex and high precision parts.

Bar capacity

The TD line can be supplied with four distinct spindles: 16mm (5/8") or 26mm (1") spindle capacity for solid bars and 36mm (1 3/8") for tubular material. The fourth option is a combination of 26mm (1") spindle capacity with a hydraulic chucking system, which allows machining of molded or blanked parts with a diameter of up to 70mm (2 3/4").

Basic equipment

All TD Cam Controlled Automatic Lathes are supplied in its basic configuration with tailstock and quill, 4 cross slides, sheet metal sliding covers and weight operated bar feeder.

Accessories

Also there is available a wide range of different accessories: six position turret, front and rear single point turning attachment, live tools, synchronized sub spindle, gear box, cross drilling attachment and others.

TB 42/60

For heavy chip removal

Concept

The series TB Cam Controlled Automatic Lathes are machines appropriate for the machining of solid bars with diameters up to 60mm (2 3/8") or tubes with diameters up to 80mm (3 1/8").
The sturdy construction has made the TB models an ideal machine for applications which require a high volume of chip removal.

Modular system

Various attachments and accessories are available in order to meet the machining needs of the user.

- Six position turret
- Spindle gear box
- Front and rear single point turning attachments
- Sinchronized sub-spindle
- Thread milling attachment
- Plus several others

A 15/25 E

Frequency controlled automatic lathe

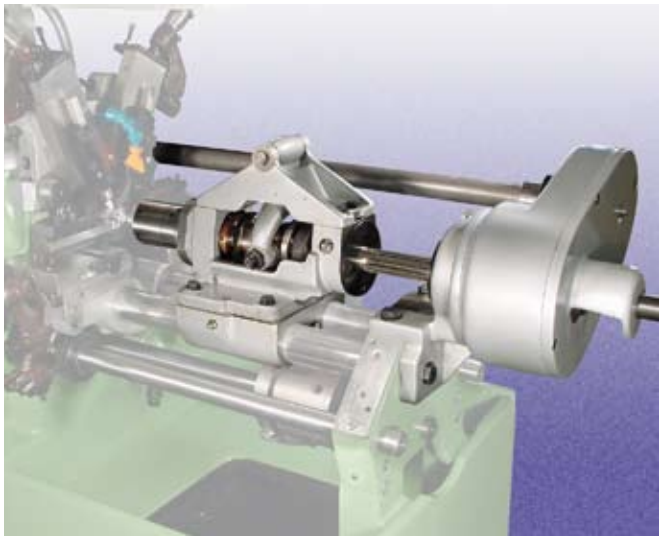
- The series A 15 E and A 25 E are equipped with frequency control both for spindle speed and production rates. With this modification, the classic A15/25 becomes more universal and flexible. No more gears to change during setup and low noise emission during operation.
- Spindle speeds continuously variable up to 6,500 rpm (A15 E), resp. 4,000 rpm (A 25 E).
- Production rates adjustable between 30 and 1,500 parts/hour by servo controller.

TB 42/60 E

Flexibility and heavy chips removal

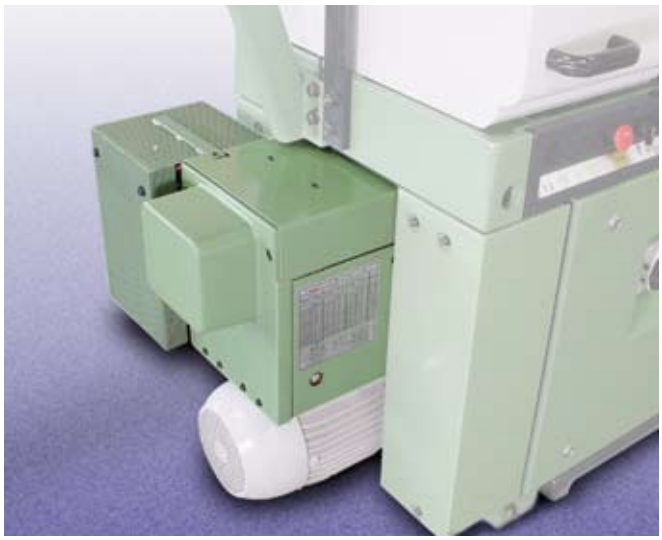
- The series TB 42 E and TB 60 E, well known automatic lathes with study construction, are now equipped with frequency controlled drives.
- Continuously variable spindle speeds up to 3,150 rpm (TB 42 E), resp. 2,500 rpm (TB 60 E).
- Output is variable between 16 and 800 parts per hour
- Simplified setup
- Low noise emission
- Reducing unproductive cycle time

Accessories



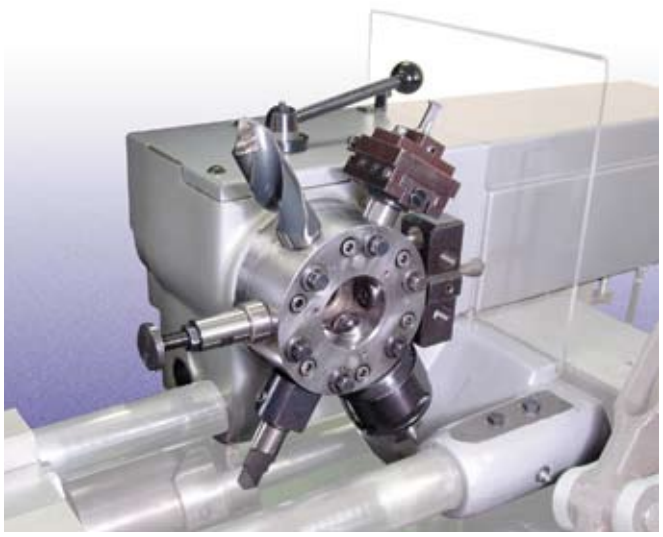
Sychronized sub-spindle (GLE)

For cutting off parts without a burr or for machinging on the back side of the parts. The sub-spindle revolutions are sychronized with the main spindle speed. It is also possible to discharge turned parts out of the working area.



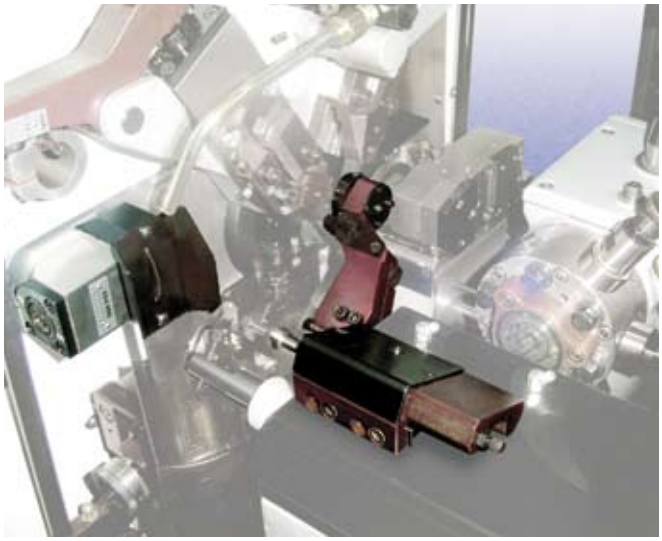
Gear box

This accessory, available for the models TD and TB, drives the camshafts at different speeds and also changes the spindle speed within the same machining cycle.
Thus, O.D. threading or tapping operations can be executed with high performance and accuracy.



Turret

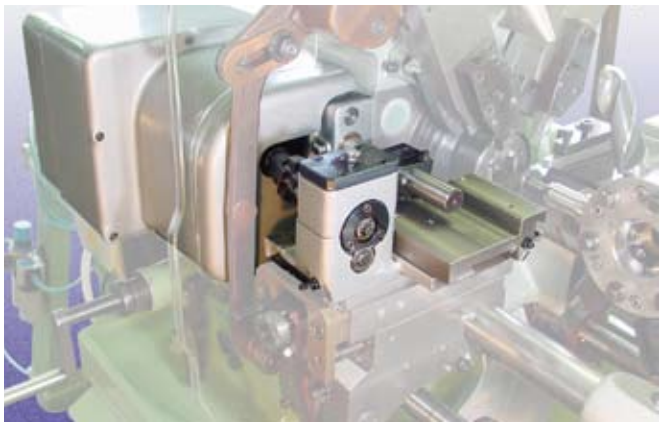
To increase the machining capability of Cam Controlled Automatic Lathes they can optionally be equipped with a turret in place of the tailstock. Six tools on the TD and TB series, and four tools on the A 15/25 series provide numerous end-working possibilities. For simple parts, the TD and TB turrets can be equipped with a double switch device. If complex tasks are required, live tools (on TD series) are available.



Pick-off, rear drilling and threading, cross drilling and slotting attachments

For the complete machining of technical parts, all TD machines can be equipped with these attachments to perform additional operations. These accessories allow complementary operations on the cut-off side of the part. The pick-off attachment for parts with a diameter of up to 16mm (5/8") takes care of transporting the semi-finished parts to the rear drilling, slotting, cross drilling or rear threading attachment.

Accessories



Single point threading attachment

All TD and TB machines allow the application of a single point threading attachment to machine standard or special threads.
The threading slide is mounted on the frontal cross slide and permits single point threading behind shoulders.

Pneumatic quick clamping system

By driving the mechanical clamping system with a high speed pneumatic cylinder, unproductive cycle times can be reduced to a minimum, making Ergomat Cam Controlled Automatic Lathes even more productive.

Front and rear single point turning attachments

A cross slide for single point turning can be mounted on either the front or the rear horizontal slide.
This attachment, designed for single point turning of external profiles of the part, permits simultaneous operations with tailstock or turret, reducing machining time considerably.

Thread milling and polygon turning attachment

This attachment is mounted on the rear cross slide. All type of Ergomat Cam Controlled Automatic Lathes can be equipped with this accessory, which is driven through the main spindle, granting high speed and accuracy.

Weight operated bar feeder

Bar feeders are required to guide and to automatically feed tube or bar material into the Automatic Lathe. More sophisticated systems, such as hydraulic bar feeders or even magazines can be connected to all Ergomat Cam Controlled Automatic Lathes.
For special applications, loading magazines for blanked or molded blanks can be supplied.

Technical data

• Models with mechanical chucking		**A15/A15E**	**A25/A25E**	**TD16**	**TD26**	**TD36**	**TB42/TB42E**	**TB60/TB60E**	
• Models with hydraulic chucking					**TDF26**		**TBF42**	**TBH60**	**TBH80**
Max. spindle capacity for solid bars	mm (inch)	15 (5/8")	25 (1")	16 (5/8")	26 (1")	26 (1")	42 (1 5/8")	60 (2 3/8")	60 (2 3/8")
Max. spindle capacity for tubular bars.	mm (inch)	15 (5/8")	25 (1")	16 (5/8")	26 (1")	36 (1 3/8")	42 (1 5/8")	60 (2 3/8")	80 (3 1/8")
Max. spindle capacity for hexagonal parts	mm	13	22	13	22	31	36	52	69
Max. spindle capacity for square bars	mm	10	18	11	18	25	29	42	56
• Distance from collet to face of tailstock	mm	240	240	285	285	285	370	370	370
• Turning length with front single point turnning attachment	mm	70	70	70	70	70	100	100	100
• Spindle revolutions,max.	rpm	6500	4000	8000	4750	4000	2000/3150	1600/2500	1600
• Output adjustable from	parts/hour	28/30	28/30	22	22	22	10/16	10/16	10
to	parts/hour	2100/1500	2100/1500	2370	1882	1882	975/800	975/800	975
• Nominal power	KW/HP	1,5/2,2	1,5/2,2	2,2	2,2	2,2	2,9/4,3	2,9/4,3	2,9/4,3
• Vertical tool holder slides stroke	mm	15/22	15/22	35	35	35	40	40	43
• Horizontal tool holder slides stroke	mm	22	22	35	35	35	40	40	43
• Net weight	kg	560	560	840	840	840	1460	1460	1600
• Dimensions without barfeed	mm	1100x1415x470		1492x1415x616			1820x1740x750		

• Accessories		S standard equipment		O optional			- not available		
Cross slide		S	S	S	S	S	S	S	S
Double vertical slide		S	S	S	S	S	S	S	S
Tailstock		S	S	S	S	S	S	S	S
Acrylic protection cover		S	S	-	-	-	S	S	S
Sheet metal sliding protection cover		O	O	S	S	S	O	O	O
Double drilling attachment		O	O	-	-	-	-	-	-
Drilling and threading attachment		O	O	-	-	-	-	-	-
Turret		O	O	O	O	O	O	O	O
Live tools		-	-	O	O	O	-	-	-
Synchronized sub-spindle		O	O	O	O	O	O	O	-
Quick clamping		-	-	O	O	O	O	O	S
Spindle reversing		O	O	O	O	O	O	O	O
Spindle gear box		-	-	O	O	O	O	O	O
Parts deflector		O	O	S	S	S	O	O	O
Single point turning attachment, front		O	O	O	O	O	O	O	O
Single point turning attachment, rear		O	O	O	O	O	O	O	O
Thread milling attachment		O	O	O	O	O	O	O	O
Polygonal turning attachment		O	O	O	O	O	O	O	O
Single point threading attachment		-	-	O	O	O	O	O	O
Cross drilling attachment, front		-	-	O	O	O	O	O	-
Cross drilling attachment, rear		-	-	O	O	O	O	O	-
Pick-off attachment		O	O	O	O	O	O	-	-
Linked up with pick-off attachment:									
Rear drilling station 1 (*)		-	-	O	O	O	-	-	-
Rear drilling station 2 (*)		-	-	O	O	O	-	-	-
Cross drilling attachment (*)		-	-	O	O	O	-	-	-
Slotting attachment (*)		O	O	O	O	O	-	-	-
Chamfering attachment (*)		O	O	-	-	-	-	-	-
Back tapping attachment 2 (*)		-	-	O	O	O	-	-	-
Special automatic feeding magazines for blanks		O	O	O	O	O	O	O	O

(*) Available in combination with the pick-off attachment - for back side machining

Other accessories upon request. Technical data subject to changes without notice.

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