

YOUR PARTNER WORLDWIDE



TD Series

Portable lathe for on-site machining of valves, flanges, pumps, turbine housings etc.



THE PREMIUM-PRODUCTS – MADE BY EFCO – MADE IN GERMANY

A forward-looking solution for machining the valves of today

EFCO-TD

The portable TD machine for turning drill holes and sealing surfaces in valves, cylinders, pumps, turbine housings, flanges etc. It is particularly suitable for turning cylindrical sealing surfaces in high-pressure valves (board-cutting seal) and for turning complete valve seatings. Also suitable for turning conical sealing surfaces.

The TD machines are suitable for use on site and in the workshop, in nuclear and conventional power stations, for servicing equipment, in chemical engineering and petrochemicals, in structural steel engineering, in shipyards and oilfields.

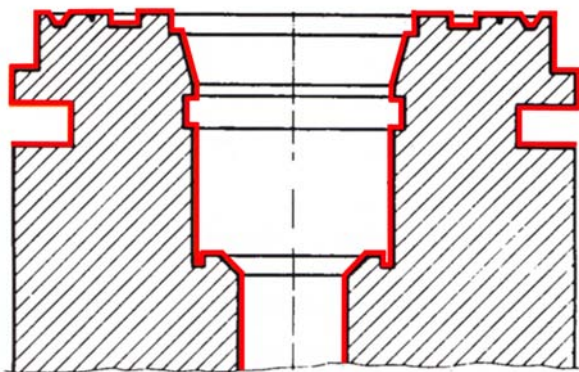
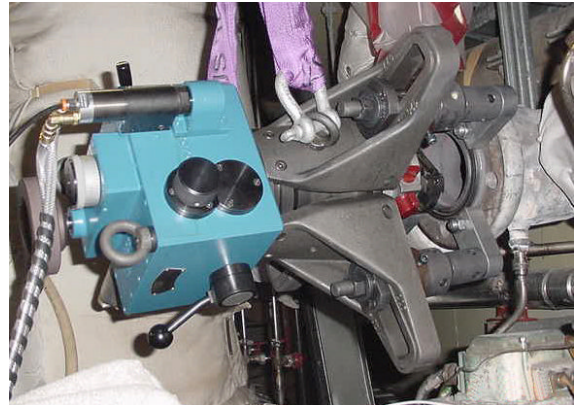
The controls are readily accessible and, wherever the machine is installed, they enable it to be controlled simply and safely.

The axial and radial paths are limited by limit switches. These machines are supplied equipped with all the necessary accessories.

The TD machines are normally installed on a flange. The machine is adjusted to the appropriate diameter of hole by means of replaceable tensioning arms. horizontal adjustment is carried out using bolts with fine threads, whilst setscrews are used for centering.

Alternatively, there is also a chain tensioning device which enables flanges to be turned as well.

Thus the machine can even be installed in situations where there is no flange.



— Machining options

Advantages:

- Fully-automatic radial and axial feed
- Fully-automatic fast return
- Excellent stability even when removing large amounts of swarf
- Suitable for installation in any situation – on site or in the workshop
- Variety of installation systems
- Precision height and center adjustment
- Guide tubes can also be supplied (and replaced) in a variety of different lengths

Taper lathe

As well as machining cylindrical and flat surfaces, series TD-1 and TD-2 lathes also allow conical surfaces to be machined. This application requires a taper lathe instead of the facing head.

There are two different sizes:

LKD 1 with a max. rotational diameter of 180 mm (7") (carriage travel = 36 mm (1.4"))

LKD 2 with a max. rotational diameter of 400 mm (15.7") (carriage travel = 60 mm (2.4"))

Taper lathes allow any angle to be machined from 0° (= facing) to 90° (=hole drilling).



Axial plunging tools

Time and again, the separation of welding seams when seating sections are welded in represents an insuperable problem.

By deploying **axial plunging tools** in conjunction with the TD machines, this job becomes almost child's play.

The way that the tool is assembled using a modular system gives it the greatest possible degree of flexibility. Thus, even with the basic version, seatings up to a depth of approx. 600 mm (23.6") can be plunged.

The standard range comprises three different tool heads (core bits):

Size 1: Ø100 – 155 mm (3.9" – 6.1") (2 cuts)

Size 2: Ø150 – 210 mm (5.9" – 8.3") (4 cuts)

Size 3: Ø190 – 250 mm (7.5" – 9.8") (4 cuts)



All core bits are equipped with interchangeable cutter elements (HSSE or HM). Plunging depth is 30 mm (1.2").

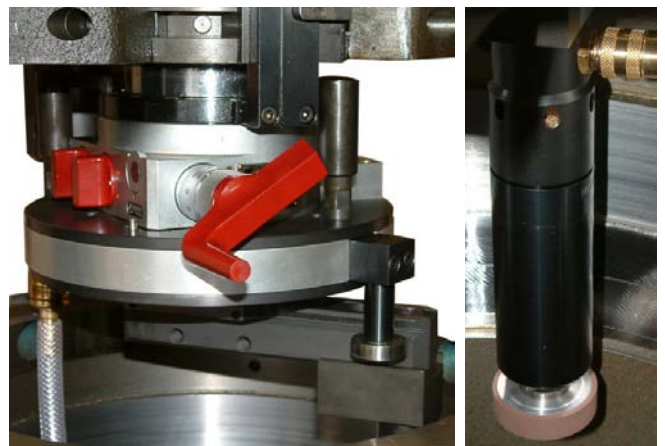
The central guide pin means that the tool can be controlled superbly well. It also offers the opportunity to punch materials through absolutely safely without the core tipping on its edge.

Grinding device for machining drill holes and flat surfaces

The TD series of portable lathes can be used to produce dressed-quality finishes.

For most applications this is perfectly satisfactory. However, if a superior-quality finish is required, then the workpiece should be ground. For this purpose, EFCO can supply a pneumatic grinding device which can be fitted to the TD machine as a special accessory.

The machine, which is aligned with the workpiece, does not need to be dismantled in order to fit the grinding device.

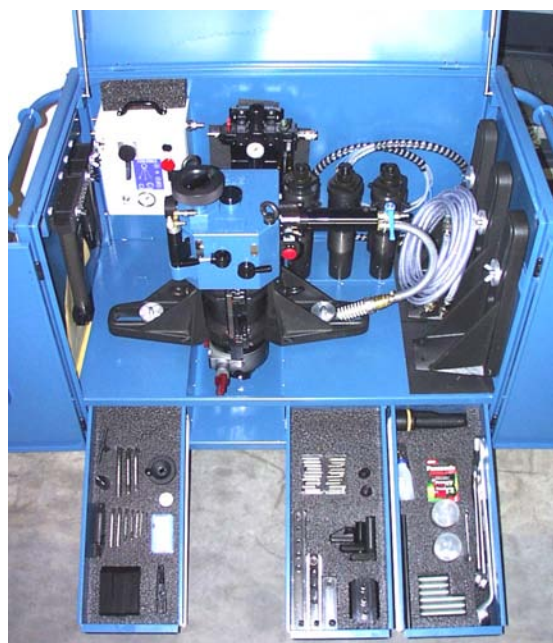


EFCO-TD – The Universal Solution

Technical data	TD-03	TD-1	TD-2	TD-2S
Turning range	up to Ø 150 up to Ø 5.9"	up to Ø 400 up to Ø 15.7"	up to Ø 600 up to Ø 23.6"	up to Ø 900 up to Ø 35.4"
Working depth	max. 250 max. 9.8"	max. 350 max. 13.8"	max. 540 max. 21.3"	max. 540 max. 21.3"
Radial travel	20 0.79"	40 1.57"	60 2.36"	100 3.94"
Axial travel	100 3.94"	120 4.2"	150 5.9"	200 7.87"
Collet diameter	Ø 80-300 Ø 3.2"-11.8"			
- Short collet arms min. Ø		330 (12.9")	400 (15.8")	400 (15.8")
max. Ø		500 (19.7")	650 (25.6")	650 (25.6")
- Long collet arms min. Ø		500 (19.7")	640 (25.2")	640 (25.2")
max. Ø		750 (29.5")	1100 (43.3")	1100 (43.3")
Drive	electric 230/110 V, 50/60 Hz or pneumatic 6-7 bar			

Dimensions in mm (inch)

The TD machines, like all EFCO machines, form a complete repair system.



The wealth of accessories supplied with these machines enables them to be fitted and adjusted precisely to virtually any equipment. The standard accessories include a range of turning tools.

The machine and its accessories are accommodated in a practical workshop trolley. The possibilities for upgrading and variations in configuration are virtually limitless.

Examples include:

- Working at greater depths
- Interchangeable drive motors (electric / compressed air).
- Additional adjustable support when submerged at great depth.
- Variable or special installation accessories
- Infinitely adjustable axial feed using an additional pneumatic or electric motor

Simply specify what it is that you want – EFCO will implement it for you.

Subject to technical change.

EFCO Maschinenbau GmbH – Valve repair and testing equipment

Otto-Brenner-Straße 5 – 7 • D - 52353 Düren • Phone: +49-(0)2421-989-0 • Fax: +49-(0)2421-86260

info@efco-dueren.de • sales@efco-dueren.de • www.efco-dueren.com

Agencies in many countries

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