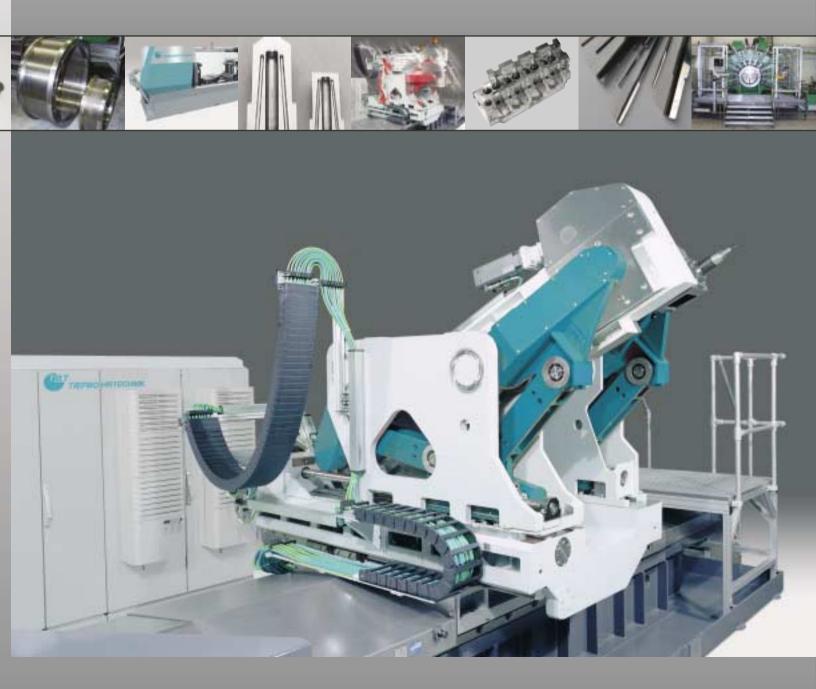


Machines, Tools, Technology Complete Solutions for Deep Hole Drilling

TBT Tiefbohrtechnik – An up-to-date overview



Company Profile / History

Company Profile



Headquarters Foundation: Dettingen/Erms Employees worldwide: 210 Certified to: ISO 9001 and VD/ Business areas: Mechanical engin

Dettingen/Erms 210 ISO 9001 and VDA 6.4 Mechanical engineering, tools, production services 1966

Going against the trend

A member of the international Nagel Group, TBT is a wholly family-owned business.

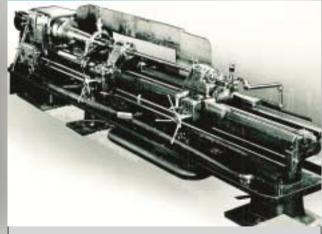
As a firm with a strong financial base, we can offer you a genuine and reliable partnership.

Foundation:



It is our declared aim to offer you efficient solutions to your machining requirements - and to the high quality that you rightly expect. We see ourselves as your partner, always looking to the long term in our collaboration.

Durable and long-lasting



Founded in 1966, TBT has from the start specialised in the production technology of deep hole drilling. The success of our company policy is underlined by our rise to become the market leader in the deep hole drilling sector. This confirmation spurs us on to continue being the number one in the future. Why not put us to the test?



Our experts can advise you in the selection of suitable tools and develop the suitable execution for your requirements. We follow this up by using ultra-modern design and manufacturing processes.

Retrofitting



Looking for a machine to cover short-term capacity requirements? Or do you have no long-term orders on the go at the moment? Then the answer is possibly a fully overhauled machine of proven TBT quality. And we would be happy to take back your used machine as well.

Production Services



On the look-out for production possibilities until your new machine arrives? Having to outsource deep hole drilling assignments with high quality requirements? Got a production bottleneck that needs to be rectified fast? Then the contract drilling capacities of our Production Service department are just what you need.





We regard ourselves as problem-solvers for your deep hole drilling tasks. To this end, we look at the whole deep hole drilling process in your production. Developed by in-house specialists and tested in our own test department, our solutions enable us to offer you strong support.

Horizontal Deep Hole Drilling Machines

Small Horizontal Deep Hole Drilling Machines



Туре	Spindles	Solid Drilling*	Max. Drilling Depth**
ML 200	1 - 4	0,9 - 15 mm	800 mm
ML 250	1 - 4	0,9 - 25 mm	1.200 mm
ML 300	2 - 6	4 - 20 mm	800 mm

* depending on the number of spindles;

** without drill changing

Workpieces



Large Horizontal Deep Hole Drilling Machines



Туре	Spindles	Solid Drilling*	Max. Drilling Depth**
M 320	1 - 4	up to 40 mm	2.300 mm
M 500	1 - 4	up to 75 mm	2.800 mm
M 630	1 - 2	up to 150 mm	4.000 mm
B 3/4	1	up to 200 mm	15.000 mm

* depending on the number of spindles and configuration;
** without drill changing

Milling & Deep Hole Drilling Centers



With a wide range of machine types, automatic tool changers, conventional tools and deep hole drills,

we offer a comprehensive range of solutions for tool and mould construction.

Workpieces





The BW 300 and BW 400 for special applications such as the STS drilling of printing cylinders, platens, end pieces of bore rods for oil drilling, tube bottoms, engine blocks and much more. Milling work, thread cutting and twist drilling. Available as a customized solution, e.g. with tool changer for STS tools.

Crankshaft Machining

End Finishing



The ENDURO for the end finishing of crankshafts and gear shafts is available in several sizes.



With 1- or 2-fold workpiece clamping, cutting to length, milling, twist drilling, thread cutting in one clamping.

Deep Hole Drilling Centers



With up to three workpieces machined simultaneously in one center, the deep hole drilling centers offer maximum productivity for car, truck and outsize crankshafts. NC tailstocks, radial positioning and sealing enable ultra-short changeover times. Countersinking, circular milling and drilling can be done in one clamping operation.

Tape Finishing



Our co-operation with Nagel enables us to offer you transfer- and universal tape finishing machines in several sizes.

Whether it is motorcycle, car or truck, or a large sized crankshaft up to 3,5 m, in TBT you have a competent point of contact for anything to do with the complex area of crankshafts.

Units, Connecting Rod Machining, Pellet Dies



Whether machining crank cases or cylinder heads, TBT is the right supply partner

for complete lines with or without workpiece transfer.





6

We offer single machines for deep hole drilling or complete lines

with pressing in of bushes and calibration, including workpiece transfer.



One of our engineers' highlights, unbeatable in precision and productivity. Up to 12 spindles are in use

simultaneously. It's a solution that demonstrates the technological leadership of TBT in deep hole drilling.



Contact details for TBT



TBT Tiefbohrtechnik GmbH + Co

Siemensstrasse 1, D-72581 Dettingen a. d. Erms Phone: +49(0)7123/976-0 Web: www.tbt.de Fax: +49(0)7123/976-100 e-mail: info@tbt.de

TBT UK Limited

Gorsey Lane Coleshill Birmingham, B46 1JU England Phone: +44 1675 433250 Fax: +44 1675 433260 e-mail: info@tbtuk.com TBT Sàrl Zone Industrielle Rue Joseph Cugnot F-57200 Sarreguemines France Phone: +33 387 983318 Fax: +33 387 984932 e-mail: contact@tbt.fr

TBT Automotive Division

286 Dino Drive Ann Arbor, MI 48103, USA Phone: +1 734 426 8217 Fax: +1 734 426 8229 e-mail: mrussel@tbt-usa.com



Kadia TBT Inc.

4848 Stenstrom Rd. Rockford, IL 61109-2628, USA Phone: +1 815 874-4799 Fax: +1 815 874-5262 e-mail: kadiatbt@inwave.com

TBT China

Room 2009, Civil Aviation Center, No. 18, Xin Jin Qiao Road, 201206 Shanghai, Pudong PR China Phone: +86 2150304310 Mobile: +86 13 901749053 Fax: +86 21 50304311

e-mail: tbt-china@online.sh.cn