

TRACTO

Further information
on GRUNDODRILL

[TRACTO.COM/GRUNDODRILL](https://tracto.com/grundodrill)



GRUNDODRILL 28Nplus
FLUID-ASSISTED HDD RIG
TOP PERFORMER



ADVANCED TRENCHLESS TECHNOLOGY

GRUNDODRILL 28Nplus

SELF-SUPPORTING AND DYNAMIC

Achieves peak values in every discipline

- The existing drive power of 224kW is 100% converted into drilling power and is absolutely unique in the power class up to 300 kN pulling force.
- The Bentonite pump supplies max. 650 l/min. for maximum productivity and fast drilling progress, even with large upsizing diameters.
- The highly efficient engine technology with emissions standard Stage V has particularly low noise and emissions and is frugal in consumption.

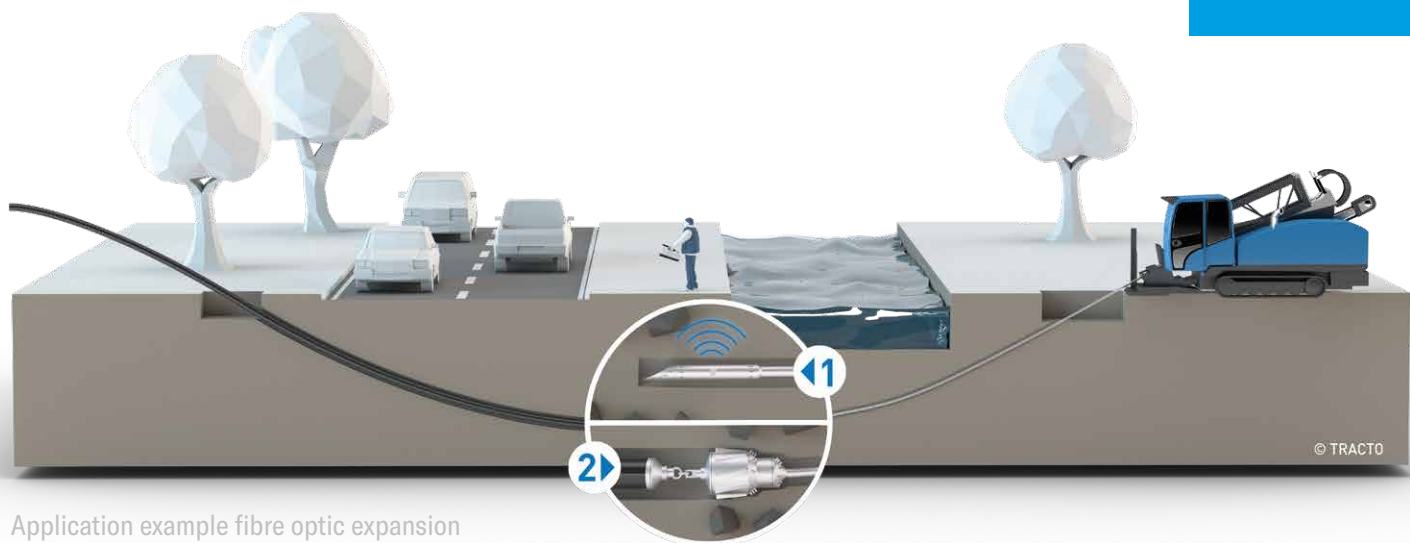
Powerful drive

- Convertible for cable-guided boring for tracking in challenging terrains and great depths Rack and pinion drive (toothed rack)
- Stepless adjustment of torque and speed, maximum rotational power and maximum productivity at any speed
- Optimum adaptation to ground conditions and requirements

Best-in-class values

- Slim design and minimal distance from drilling axis to outer edge of machine
- Largest rod magazine in this performance class with 288 m of drill rods onboard
- Fully automatic and particularly ergonomic reloading of drill rods - no machine operator is required in the cabin
- Rotation of drill rods within rod box possible during normal operation, which results in even use and even wear of the rods

APPLICATION



Application example fibre optic expansion

GRUNDODRILL
Application
video at



TRACTO.COM/
APPLICATIONS

INSTALLATION METHOD

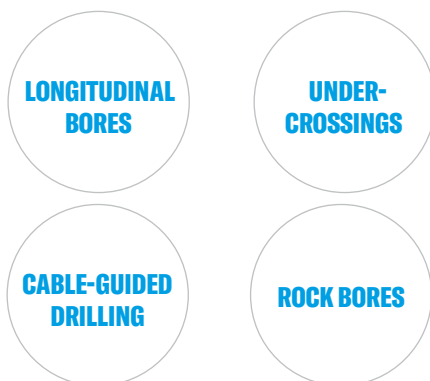


BORE DIAMETER

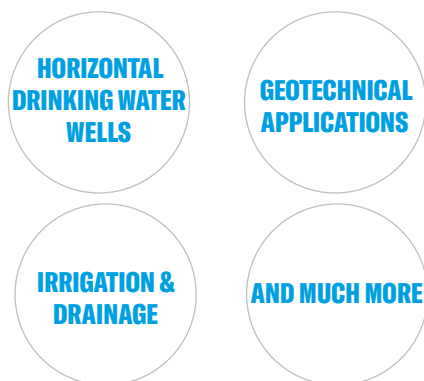


140 - 900 MM Ø*

MAIN APPLICATIONS

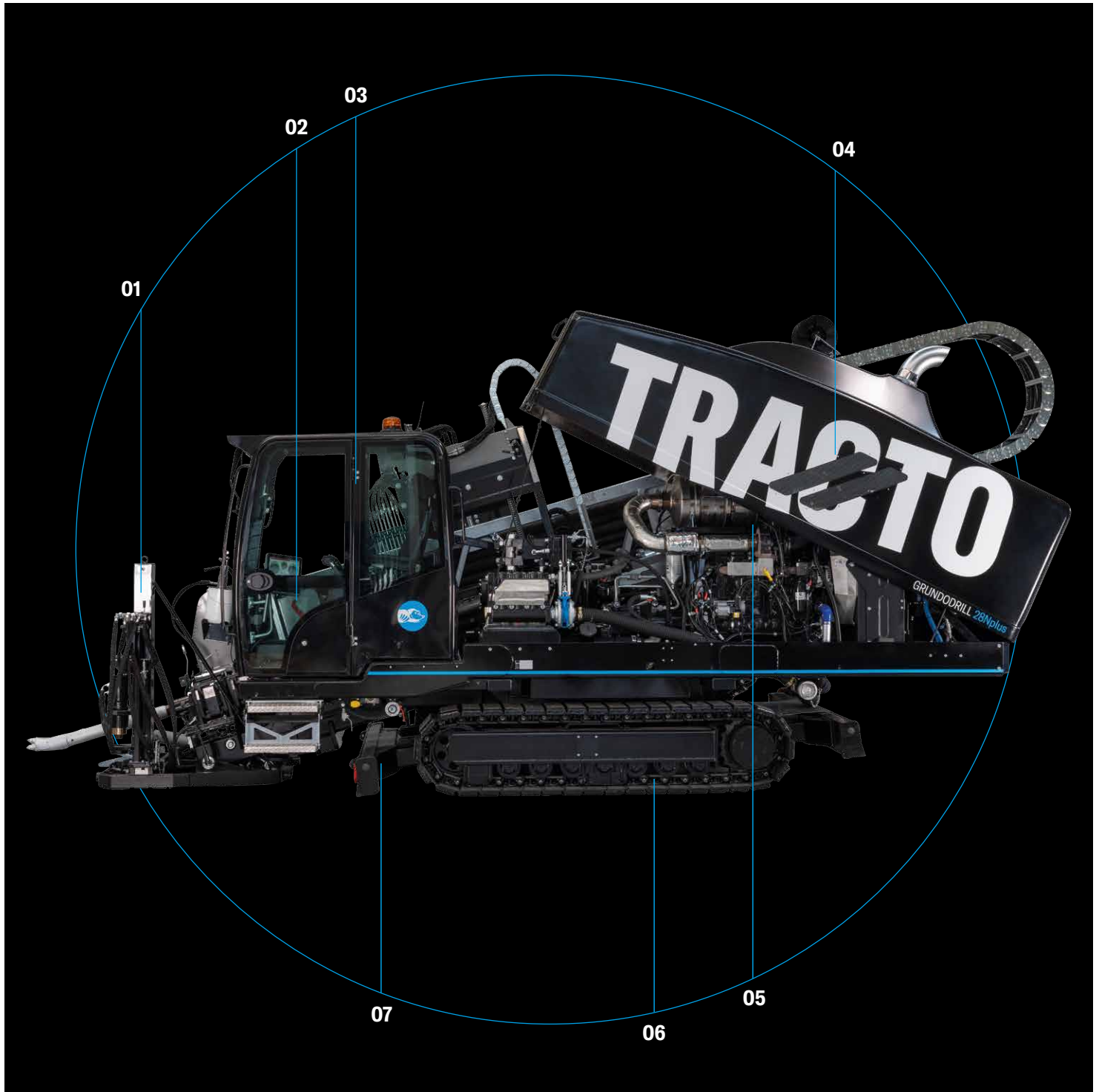


SPECIAL APPLICATIONS



* depending on soil conditions

OVERVIEW



01 Anchoring system for increased stability while drilling

02 Automatic rod exchange, high productivity, even wear of all rods due to a precise approach of the magazine bays
The largest rod magazine 288 m on board

03 Comfortable swiveling cabin for high operator comfort and convenience, clearly arranged with flexible positioning

04 Large GFRP service hood, easily accessible for service and maintenance

05 Biggest Diesel engine of its class - 224 kW drive capacity for simultaneous operation of all main functions under full load

06 Extra-wide rubberised steel track undercarriage - extremely mobile and self-supporting

07 Two stabilisers - maximum stability, variable inclination of the cradle for an ideal penetration angle

GROUND CONTROL – FULL VISION, MAXIMUM COMFORT

1 | Maximum operating comfort

Two multi-function joysticks for all functions in bore and drive mode. Different operating modes, which can be freely selected by the machine operator:

Manual mode:

- All machine functions controlled by the machine operator

Semi-automatic mode:

- Memory functions for rotation and feed
- Automatic paddle mode*
- Automatic rod exchange mode*
- Automatic reloading for rod magazine*

Fully automatic operation*:

- incl. automatic drilling, automatic rod exchange, rod lubrication and cleaning, etc.

Service mode:

- Complete diagnosis of drilling system via integrated display
- Complete parameter setting/adjustment of bore rig via integrated display

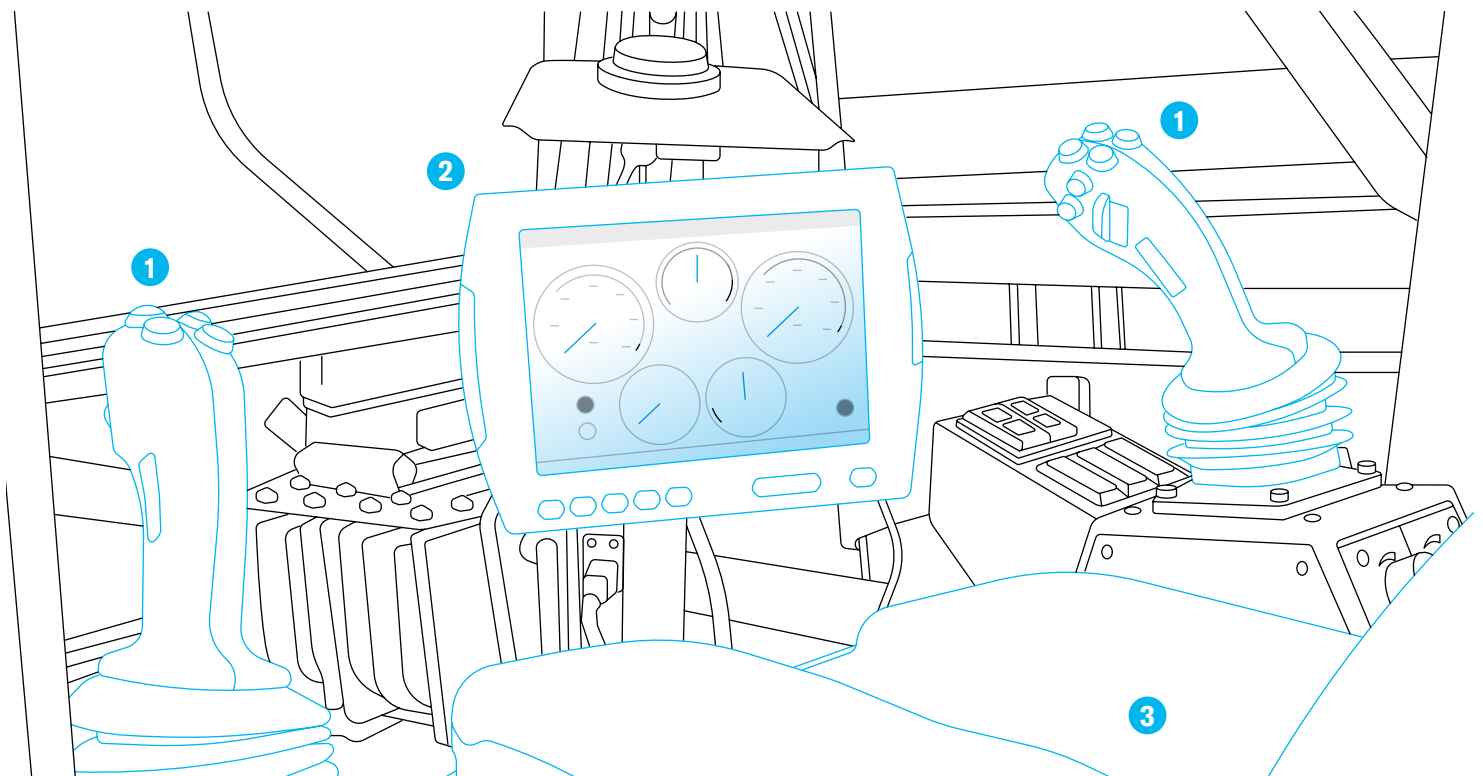
2 | Top notch workplace

- Panel PC with touchscreen and internet connection
- High-resolution colour display
- Language selection
- Automatic bore data log according to DVGW standards
- Remote diagnosis with telemetry data transfer
- LED lighting
- Radio with Bluetooth hands-free system, CD drive and USB port

3 | Custom ergonomics

- Grammer comfort seat XL: Individually adjustable, seat heater, fabric cover
- Panorama glazing for optimum overview
- Swiveling cabin, can be locked in 5 positions, if required, work can also be carried out with the cabin in transport position, e.g. in confined spaces
- Heating and air conditioning*

* optional



FUNCTION | ADVANTAGES

EFFICIENCY – METRE BY METRE

GRUNDODRILL
28Nplus
Top Performer
All highlights
at a glance



Full performance - economical from the first metre

All GRUNDODRILL rigs are designed for a wide range of applications; a long service life, minimal wear, minimal down-time and low consumption of resources and fuels – making them particularly flexible and economic – from the first day onwards.

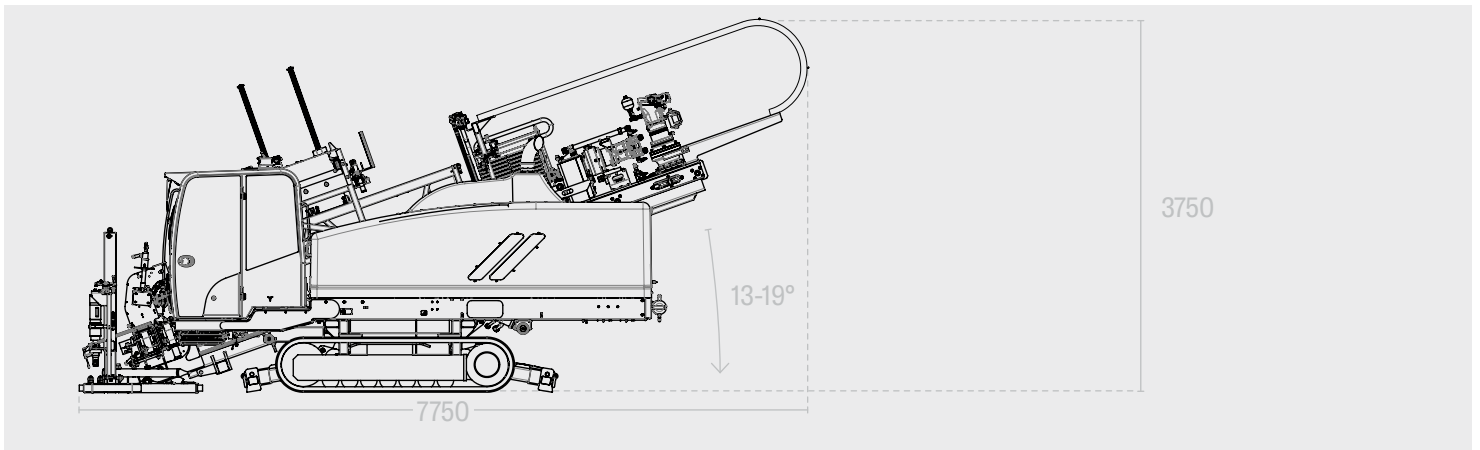
VARIANTS

GRUNDODRILL 28Nplus POWER VEHICLE

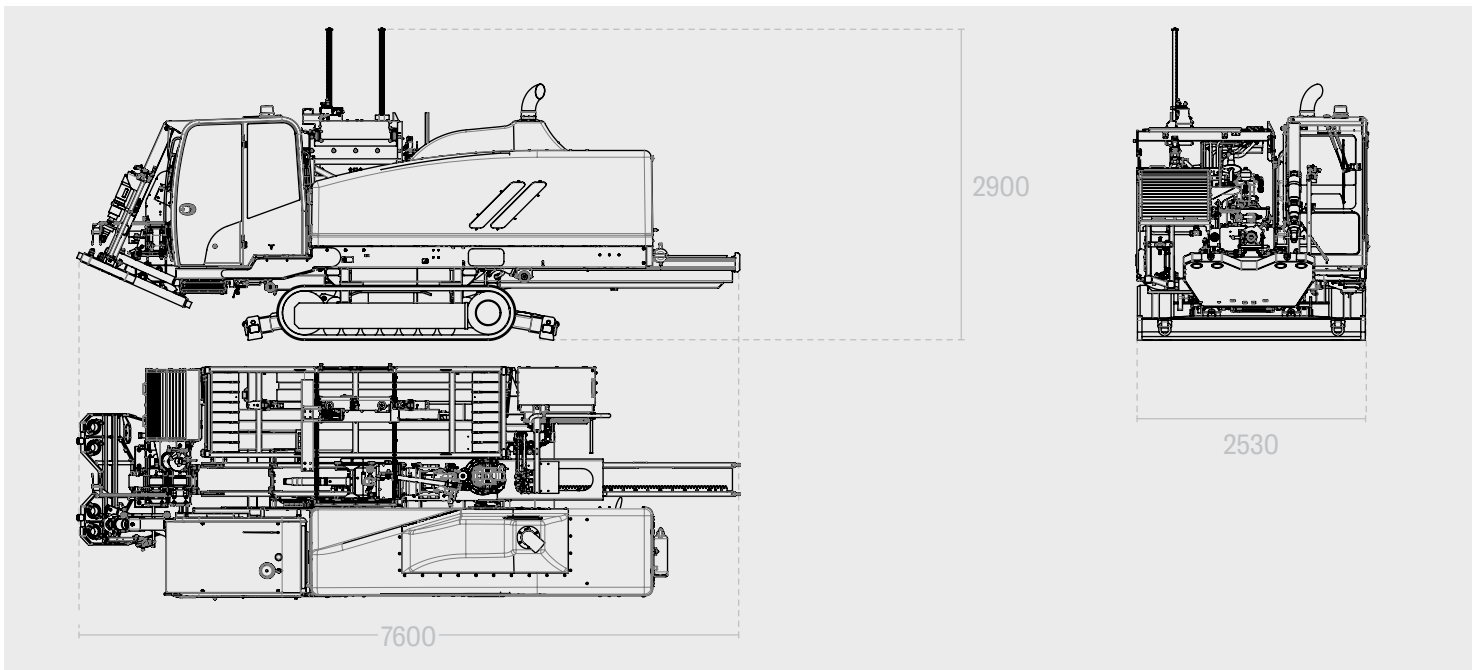
FEATURES | BENEFITS

- Cummins motor Tier 5, for drive and bore mode, 224 kW
- Stepless adjustment of torque and rotational speed for maximum rotation and highest level of productivity at any speed
- Bore rig with rubber track undercarriage, stabilisers
- Wireless remote control
- Spacious cabin, comfortable seat, joysticks, panel PC with touchscreen, air conditioning
- Automatic bore mode
- Fully galvanised rod box
- Fully automatic rod exchange system
- Fully automatic clamp and break-away facility
- Anchoring system
- Powerful HP Bentonite pump on board the rig
- Bore data logging – data transfer
- High-pressure cleaner

WORKING POSITION



TRANSPORT POSITION



VARIANTS



TECHNICAL DATA

DRILL ROD TD82

Thrust and pullback force	280 kN
Max. feet rate (without load)	36 m/min
Max. torque	11.000 Nm
Max. spindle speed	180 U/min
HP Bentonite pump	650 l/min
Bentonite pressure	90 bar
Rod magazine contents	288 m
Effective rod length Number of rods	3.000 mm 96 pcs
Pilot bore Ø Drill rod Ø	140/170 mm 82 mm
Min. bore radius	75 m
L x W x H (transport position)	7.600 x 2.530 x 2.900 mm
L x W x H (Working position with cabin swivelled in)	7.750 x 2.530 x 3.750 mm
L x W x H (Working position with cabin swivelled out)	7.750 x 3.420 x 3.750 mm
Weight max. Rod weight	19.200 kg 46 kg
Engine manufacturer	Cummins
Engine model	B6.7-C300
Emissions standard	Stage V
Max. engine output	224 kW
Diesel tank capacity AdBlue tank capacity	250 l 37,9 l
Fresh water tank capacity	155 l
Inclination angle	0–30 °
Max. driving speed 2 stages	3,3/5 km/h
Sound pressure level L_{PA} Sound power level L_{WA}	75 dB 107 dB
Workplace vibrations	$\leq 0,5 \text{ m/s}^2$
Upsizing $\varnothing^* \leq$ Outer pipe $\varnothing^* \leq$	900/710 mm
Bore length* \leq	500 m

*depending on ground | Subject to change



WELL EQUIPPED IS HALF WAY THERE

Drilling tools, perfectly adapted to the bore rig, guarantee an optimal drilling progress in every type of soil. Robustness and durability of all parts are guaranteed.

STANDARD DRILLING TECHNIQUE

Transmitter housing with bore head



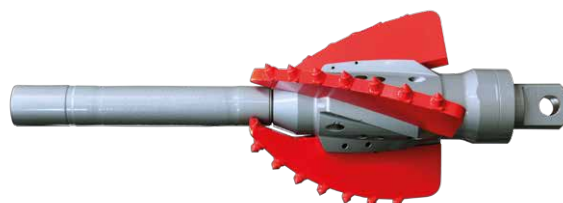
Medium Soil Reamer



Cone Reamer



GRUNDOREAM



MIXING SYSTEMS

A first-class drilling fluid technique is an important component for successful drilling. In combination with the drill rig and drilling tools, the drilling fluid technique of TT provides a coherent package for efficient work – even in complex soils.

Powerful mixing systems and pumps guarantee high drilling fluid performance. Professional measuring units and drilling fluid

additives are available to ensure a drilling fluid quality that is well adapted to the soil.

Learn more about this topic in our in-house training courses or ask us for additional information on mixing systems and truck platforms.



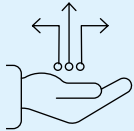
MIXING SYSTEM MA07

TRANSPORT

We are happy to provide assistance with the configuration and choice of your truck incl. trailer. For details, contact your local sales representative.

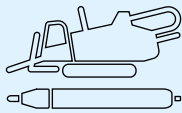
FULL SERVICE FOR TRENCHLESS TECHNOLOGY

Whether its before, during or after the purchase, whether in person or online – we are always at your side with advice and support. Our wide-ranged service is specially tailored to the requirements of trenchless pipe installations, so you can concentrate fully on your core business.



Digital Solutions

Our website offers you the whole world of trenchless technology in digital form. Find out more about our company, our products and their applications. Discover the digital tools for the HDD drilling technology and many other intelligent solutions. Always stay up to date by using the links to our social media channels. Or you can order machines, accessories and spare parts in our eSHOP – easy and conveniently via PC, smartphone or tablet.



Nodig Product Specialists

You can truly rely on our product specialists for all technical questions regarding the function and application of our steerable and non-steerable NODIG-systems. With comprehensive knowledge in each of their special fields, you can be sure they will find the best solution for your trenchless projects and advise you competently on setting up your jobsite.



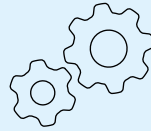
Financing

We offer attractive financing solutions for new and used machines to our customers and sales partners through the TRACTO-TECHNIK Finance GmbH. Be it financing, hire purchase, various types of leasing or insurance: we provide extensive expert advice, individually and personally, in order to find the tailored solution for you. Discretion goes without saying.



Training

Qualified training enables you to apply trenchless technology even more effectively and profitably. Our wide range of training courses for machine operators, construction professionals as well as planners and clients cover all aspects of NODIG technology, including special topics. Certified trainers also instruct you, in theory and practice according to your individual requirements, either at one of our numerous company locations, or directly on your own premises or online, independent of time and place.



Specialised Civil Engineering Service (Application Technology)

The specialised civil engineering service for application technology provides support for all your trenchless construction sites. Our experts demonstrate the steerable and non-steerable NODIG technology live in practical use, show your drilling teams how to use it or actively assist with special projects.



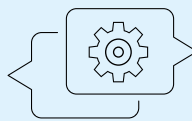
Geoservice

Precise knowledge of the soil is the key to successful trenchless projects. Our Geoservice team provides you with this professional knowledge. Our expertise puts you in a position to master every type of soil. Based on geoscientific maps and existing construction files, we supply information on the soil, which will help you with calculations or supplements.



Used Equipment

If you want to sell a used machine at an attractive price or are looking for the right equipment for your tasks, our full service for used NODIG machines will take the workload off your hands – from appraisal and price determination to professional repair and certification, through to achieving the best price for you via our used machine website with access to one of the world's largest construction machinery platforms.



After Sales

Via our worldwide service network we are always there for you, even after the purchase. A total of five TRACTO plants and seven customer centres in Germany, as well as our worldwide sister companies and sales partners guarantee fast supply of spare parts and immediate availability. Our competent service staff offer fast assistance, to ensure you don't lose any time.



**Discover all
Services**



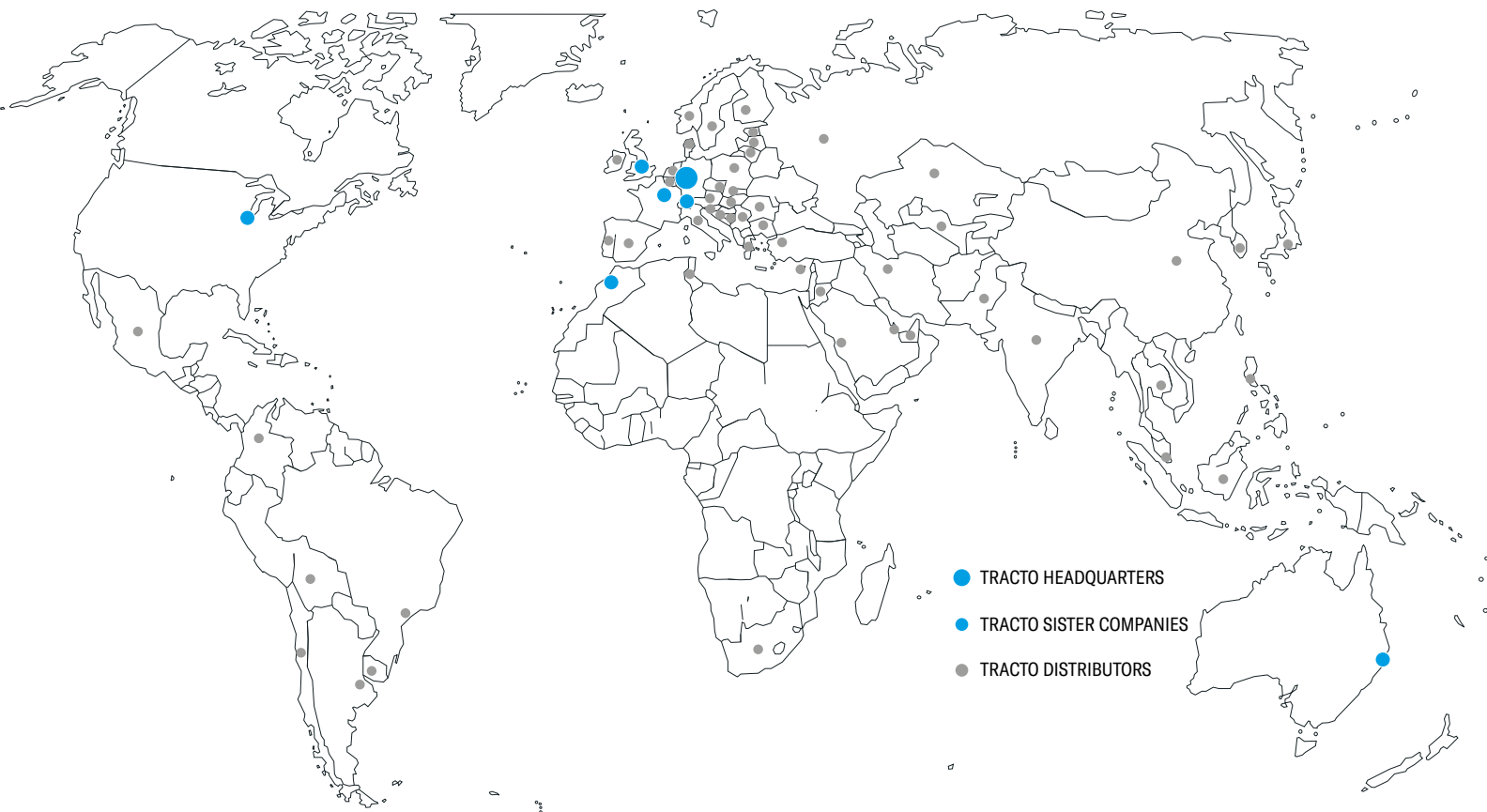
[TRACTO.COM/
SERVICES](https://tracto.com/services)

TRACTO-TECHNIK GMBH & CO. KG HEADQUARTERS

PAUL-SCHMIDT-STRASSE 2
57368 LENNESTADT, GERMANY
T +49 2723 808-0
F +49 2723 808-180
INFO@TRACTO.COM



TRACTO.COM



- TRACTO HEADQUARTERS
- TRACTO SISTER COMPANIES
- TRACTO DISTRIBUTORS

SWITZERLAND
TRACTO-TECHNIK SCHWEIZ AG
INDUSTRIESTRASSE 4
8360 ESCHLIKON TG, SCHWEIZ
T +41 79 8203897
CH@TRACTO.COM
TRACTO.COM/CH-FR

UNITED KINGDOM
TRACTO-TECHNIK UK LTD
10 WINDSOR ROAD
BEDFORD MK 42 9SU
T +44 1234 342566
F +44 1234 352184
INFO@TRACTO-TECHNIK.CO.UK
TRACTO.COM/UK

FRANCE
TRACTO-TECHNIK FRANCE S.A.R.L.
1/3 RUE DE LA PRAIRIE
F-77700 BAILLY ROMAINVILLIERS
T +33 1 60 42 49 40
F +33 1 60 42 49 43
FR@TRACTO.COM
TRACTO.COM/FR

USA
TT TECHNOLOGIES INC.
2020 EAST NEW YORK STREET
AURORA, IL. 60502
T +1 630 851 8200
F +1 630 851 8299
INFO@TTTECHNOLOGIES.COM
TTTECHNOLOGIES.COM

AUSTRALIA
TRACTO-TECHNIK AUSTRALIA PTY LTD.
10 ALICIAJAY CIRCUIT
LUSCOMBE, QLD 4207
T +61 7 3420 5455
AU@TRACTO.COM
TRACTO.COM/AU

MOROCCO
TRACTO-TECHNIK AFRIQUE S.A.R.L.
ROUTE DE TAMESNA 4022
POSTE 2044, 12220 TAMESNA
T +212 5 37 40 13 63 / 64
F +212 5 37 40 13 65
INFO@TRACTO-TECHNIK.MA
TRACTO.COM/MA

TRACTO ADVANCED TRENCHLESS TECHNOLOGY

TRACTO PARTNER:

Images, text and graphics subject to change. Some of the product or service designations listed below as well as depicted logos are registered trademarks of TRACTO and in these cases are subject to the respective applicable trademark law.