

# TRACTO

All information  
about GRUNDOSTEER

[TRACTO.COM/GRUNDOSTEER](http://TRACTO.COM/GRUNDOSTEER)



GRUNDOSTEER  
GUIDED ROD PUSHER  
SIMPLY FULL  
TARGET CONTROL



**ADVANCED TRENCHLESS TECHNOLOGY**

# GRUNDOSTEER PS130

## SIMPLY POINTING THE WAY

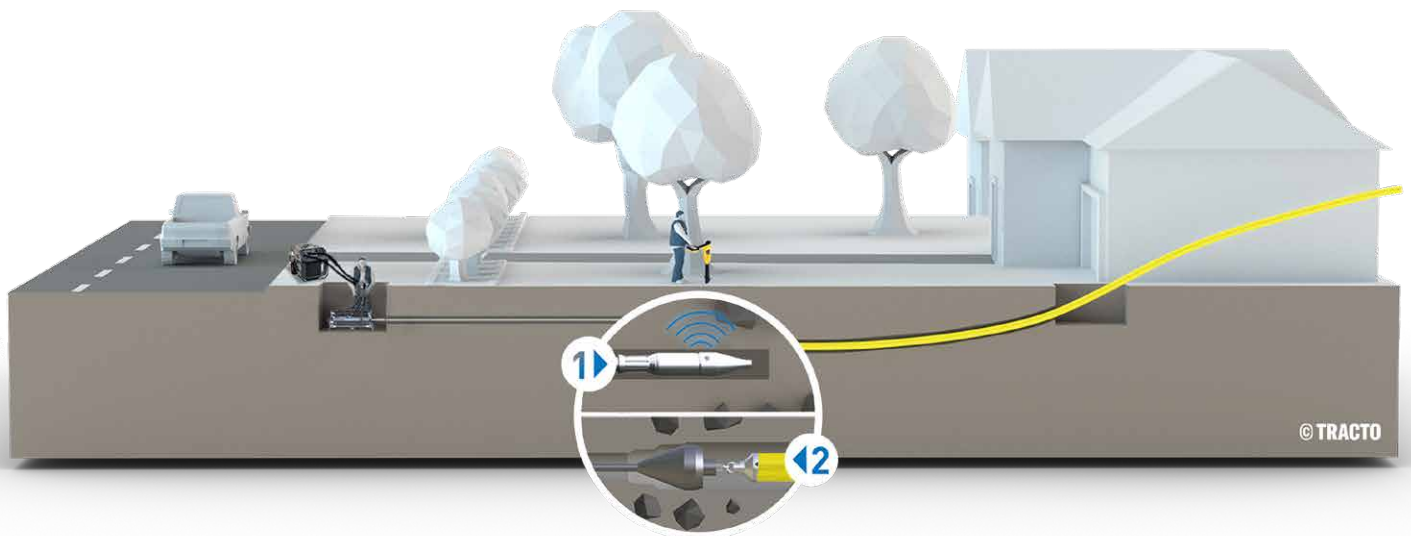
The GRUNDOSTEER guided rod pusher combines proven methods of trenchless pipe installation in one easy-to-use device. The locatable steering head displaces the soil as the rod advances, similar to a soil displacement hammer, but is tracked above ground with a locating device. Deviations from the route can be read on the locating device and corrected by rotating the rod. In the target pit, the steering head is replaced with an expander and the hole is enlarged during retraction. At the same time, the attached pipe is retracted. The use of drilling fluid can be dispensed with during guided rod pushing.

### Ideal not only for house connections

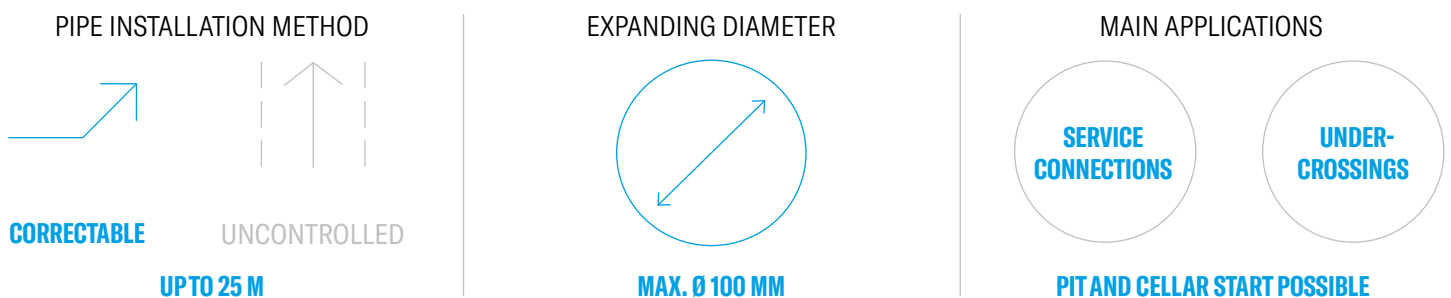
The GRUNDOSTEER can be used in all displaceable soils. The static, correctable method is ideal for short undercrossings in dense infrastructures and for the quick and easy creation of all kinds of house connections.

At just under 1 metre long and 80 cm wide, the very compact system can work from a pit to the building or from the building through a borehole in the house wall. A full 130 kN is available for jacking and pipe installation up to DN 100, to which the guided rod pusher owes its type designation PS130.

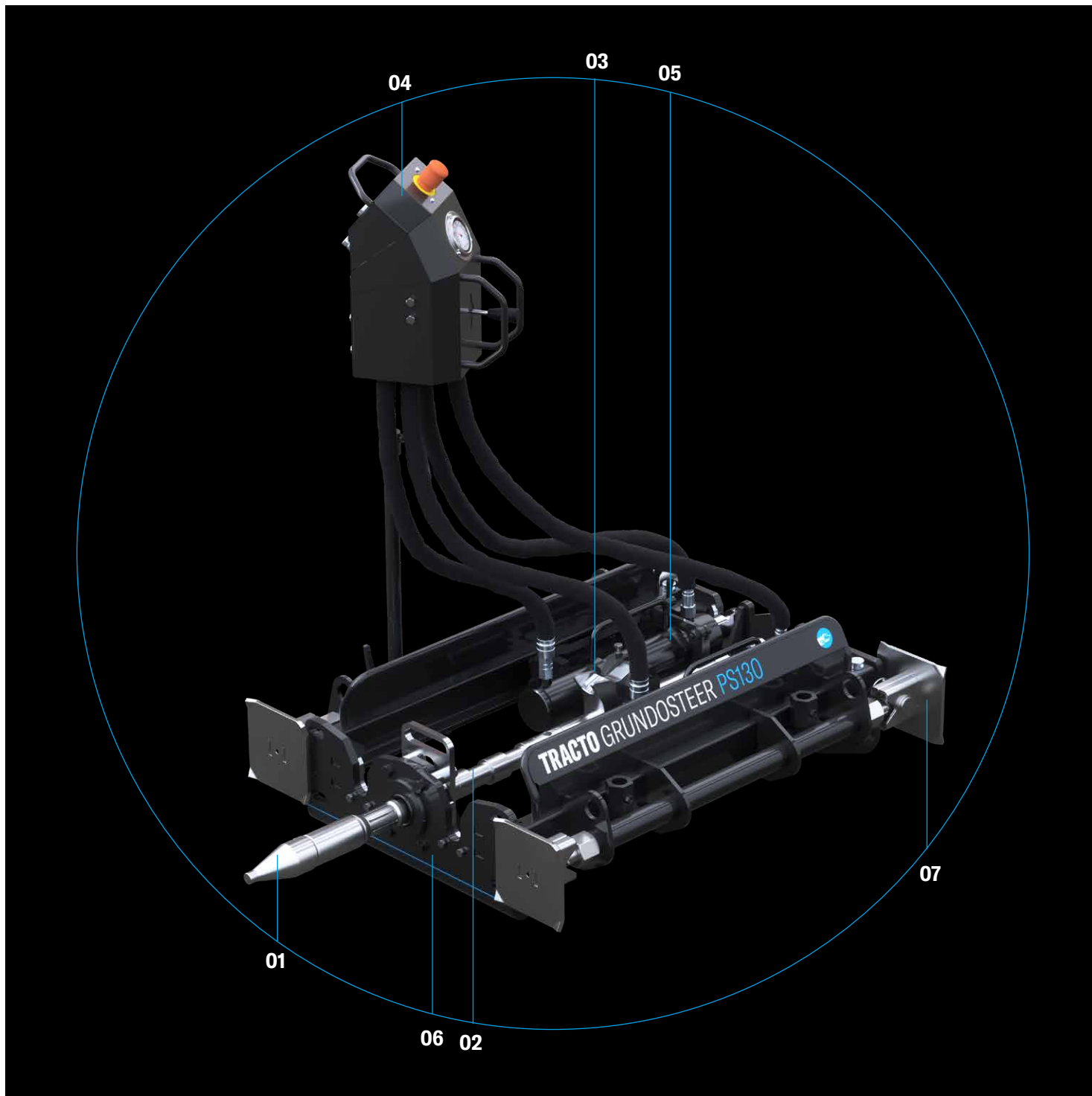
## APPLICATION



Application example Gas house connection



## OVERVIEW



**01 Adjustable steering head with integrated transmitter** enables permanent positioning by means of localisation and direction correction

**02 Robust SIMCON® rods** with Simple-Connect plug-in connection for quick assembly and disassembly

**03 Insensitive thrust latch** for safe rod advancement and pipe installation thanks to a positive connection with the Simcon® rod

**04 Easy-to-operate, height-adjustable control unit** allows speed changes when advancing and retracting the rod

**05 Variable insertion position of the hydraulic cylinders** for identical thrust and tensile force

**06 Detachable base frame** for easy transport of the machine to the starting pit or into the cellar

**07 Integrated support foot** for fixed bracing in the pit in a simple manner

# ENTRY-LEVEL MODEL UNCOMPLICATED, AFFORDABLE, ROBUST

Getting started with the correctable trenchless directional pressing method is easy in several respects. On the one hand, the GRUNDOSTEER is extremely easy to use and designed for a high level of operating comfort. Thanks to the simple but reliable control principle and the uncomplicated direction correction, even less experienced operators can make accurate house connections or short under-crossings with trenchless technology.

### Flexible use

The GRUNDOSTEER is ideal for making all types of house connections from the pit to the building or in the opposite direction. It can be used in all displaceable soils. The static but correctable method not only enables the accurate laying of protective or product pipes for house connections and under roads, but can also be used for trenchless pipe installation under railway tracks.

### The simple route

As with the soil displacement hammer method, the target point is aimed at by means of sighting optics and the soil is statically displaced during the advance, in this case by hydraulic pressing. GRUNDOSCOPE, a telescopic aiming frame with integrated sight, is used for target alignment.

### Full control

The direction of advance is constantly monitored by means of localisation and can be corrected at any time. The position of the steering head is changed by rotating the rod. This can be read off the time scale on the position connector.

### Smart connection

The specially designed rods (SIMCON®) are not screwed together, but are securely connected by a simple bolt connection. No need for time-consuming screwing. This saves energy and shortens the work process enormously.

Secondly, the investment costs for the GRUNDOSTEER, including the components required for drive, alignment and localisation, are relatively low. The fact that expensive drilling fluid and its costly disposal can be dispensed with during guided rod pushing also has a positive effect in terms of time and costs. In addition, the robust design of the GRUNDOSTEER in proven TRACTO quality quickly pays for itself.

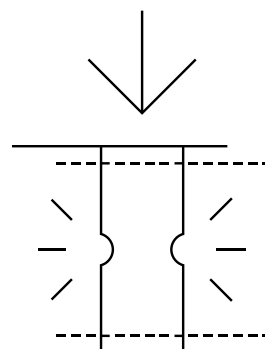
### Affordable equipment

The low investment required for the GRUNDOSTEER enables a favourable entry into trenchless technology.

- A standard hydraulic power unit is sufficient to drive the guided rod pusher.
- Users who already own soil displacement hammers can use their existing GRUNDOSCOPE aiming frame with telescopic sight for targeting.
- A simple localisation technique is sufficient for determining the position of the steering head during the advance.  
A one-handed receiver for reliable depth display is included in the scope of delivery.

### Quality

The design of the GRUNDOSTEER in the familiar TRACTO quality is extremely robust. The reliable technology is based on proven solutions and processes.



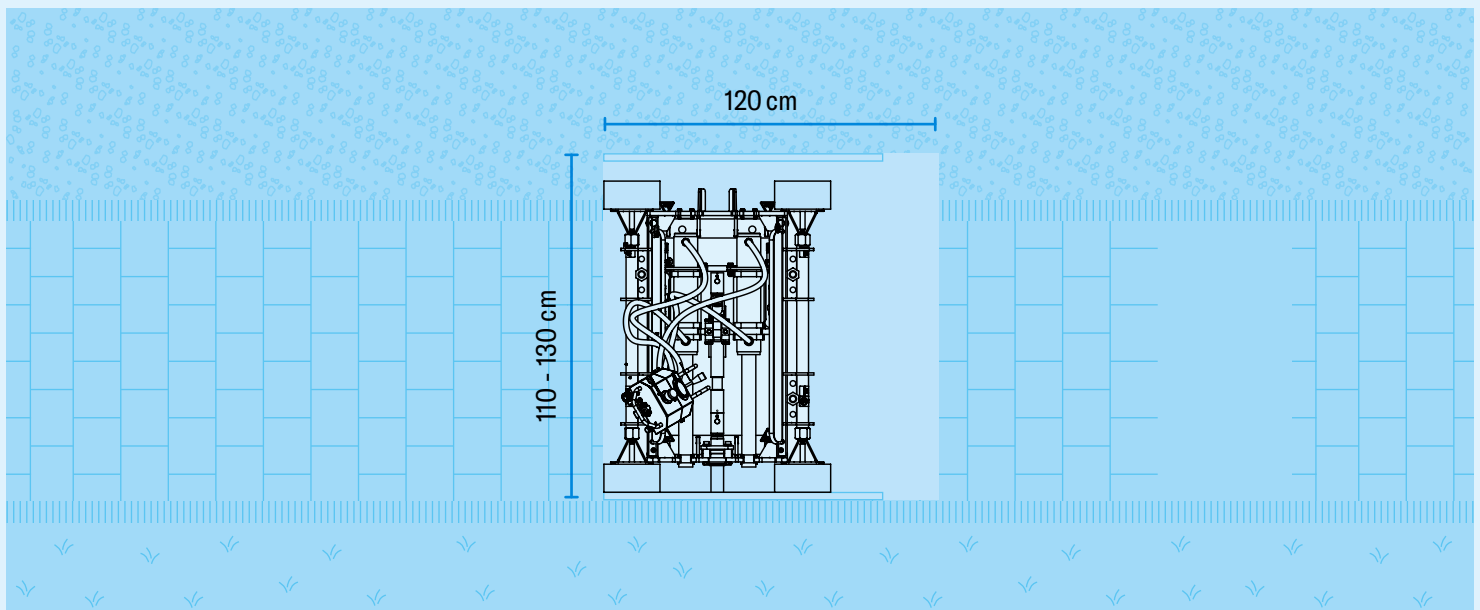
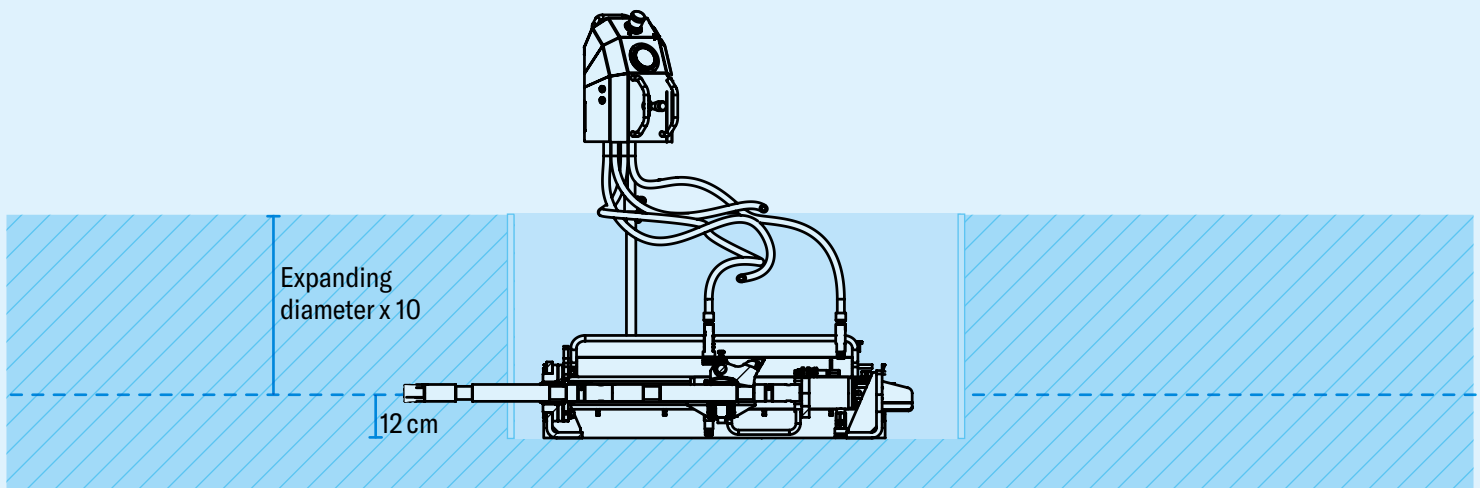
**GRUNDOSTEER**  
Guided  
rod pusher  
All highlights  
at a glance



# COMPACT PIT EQUIPMENT FOR DENSE INFRASTRUCTURES

The compact dimensions of the GRUNDOSTEER guided rod pusher are ideal for use in dense infrastructures. Thanks to the small dimensions, only small, shallow pits which are at least 110 cm wide and 120 cm long are required. This enables use even in confined spaces and densely built-up areas. A lorry crane or mini excavator is completely sufficient for handling on the construction site.

Due to the small distance between bore axis and pit floor, the GRUNDOSTEER can be used for shallow drilling near the surface and crossing over existing pipeline networks. This is ideal for the production of FTTH connections, for example. With the help of the pit bracing adapter and the integrated hydraulics, the GRUNDOSTEER is braced in the pit with minimal effort.



**GRUNDOSTEER PS130**

# TOP DESIGN ERGONOMIC, PRACTICAL, GOOD

## 1 | Operating panel

The height-adjustable operating panel can be adjusted to suit the height of the operator and allows them to work comfortably while standing. The feed speed is regulated via a smooth-running hand lever. The pressure curve can be checked visually on the pressure gauge during press-in and expansion. The impact process can be visually monitored by positioning it in the pit.

## 2 | Latch

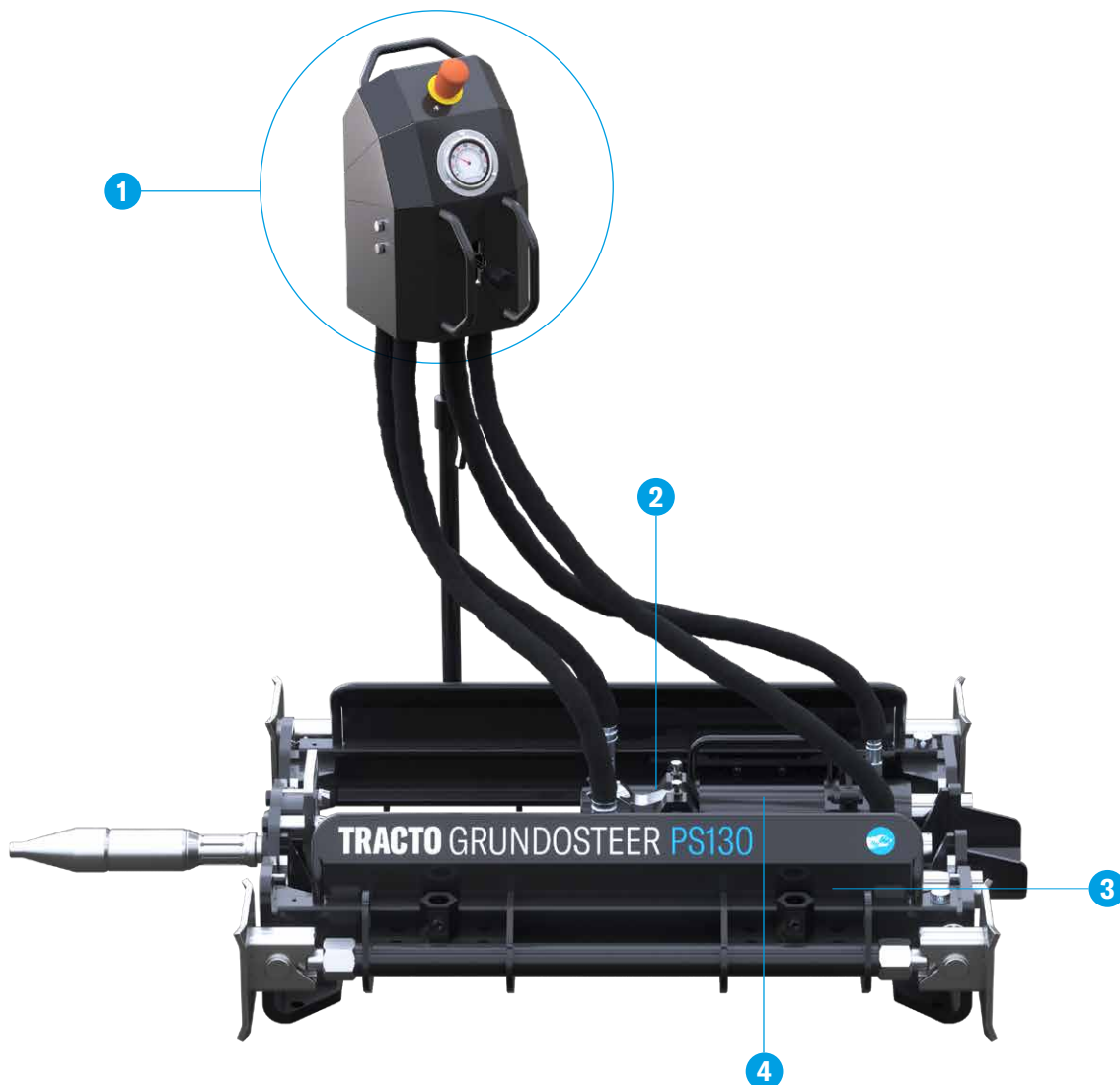
The movable latch forms a positive connection with the rod so that it does not slip when it is pushed forward and pulled back. The alloy steel handle is resistant to dirt and wear.

## 3 | Hydraulics

The two parallel, swivelling hydraulic cylinders provide the full 13 tonnes of thrust and tensile force for pushing and pulling. The parallel arrangement also ensures a high drive speed during the no-load stroke.

## 4 | Base frame

The base frame can be dismantled into individual parts using two bolts. The heaviest part weighs less than 54 kg, so no lifting gear is required to transport the system and it can be quickly assembled and disassembled. Another practical feature is that the frame can be installed under neighbouring external cables.







TRACTO

TRACTO GRUNDOSTEER PS130



# LOCATABLE, STEERABLE, ACCURATE

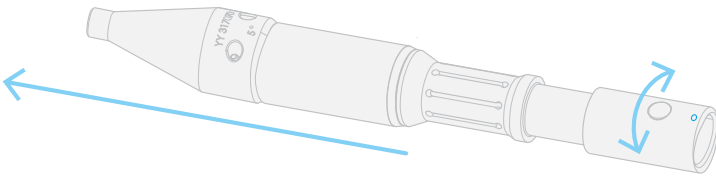
## Smart head

Thanks to the combination of static soil displacement and the ability to easily correct the direction of advance, the GRUNDOSTEER closes the gap between uncontrolled soil displacement hammers and controllable mini-HDD directional drilling machines, but requires no prior knowledge of controllable drilling technology.

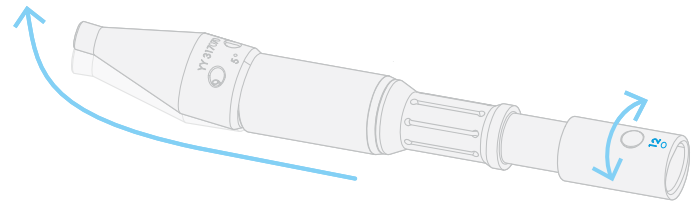
The key to the accuracy of directional pressing with the GRUNDOSTEER is the locatable steering head. Its position is constantly monitored via the built-in transmitter using a locating device in order to detect any deviations from the route, e.g. due to obstacles, and correct them if necessary. Directional corrections during the

pilot advance are made possible by the slightly inclined shape of the steering head. To do this, the position of the head is simply read off a time scale on the position connector of the rod and, if necessary, changed by rotating it in the desired direction. This reliable control principle has further advantages in addition to accuracy:

- Rotating the rod is only necessary for directional corrections
- Manual intervention (forced turning) is not required during the pushing process
- The working posture during pilot pressing is ergonomic
- Susceptibility to errors during the pilot advance is reduced significantly.



Steering head in zero position = straight ahead



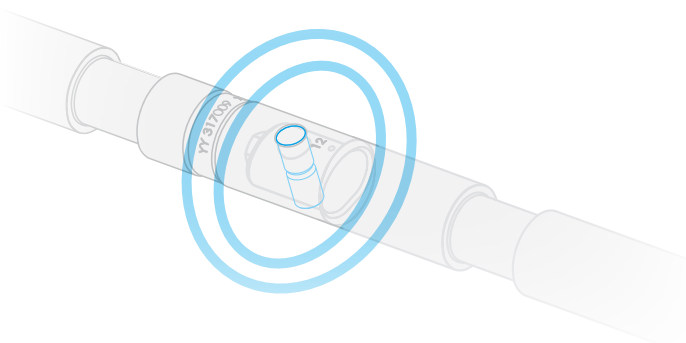
Steering head deflected = direction correction

## Simple-Connect

The special feature of the SIMCON® rods specially designed for the GRUNDOSTEER is the simple yet secure connection via a bolt. Thanks to this Simple-Connect plug-in connection, the rods can be assembled and disassembled without screwing. The patented rod connection guarantees positive force transmission to the guide head, which significantly reduces the risk of load transmission errors.

Further advantages of the SIMCON® rod connection are:

- Quick rod change and shorter cycle times thanks to reduced assembly effort
- Lower operating fluid consumption, as no thread lubrication is required
- Lower susceptibility to errors and dirt resistance
- Ergonomic working when connecting the rods





FUNCTION | ADVANTAGES

GRUNDOSTEER

PACKS A POWERFUL PUNCH  
WITH LITTLE INPUT

GRUNDOSTEER  
Guided  
rod pusher  
All highlights  
at a glance





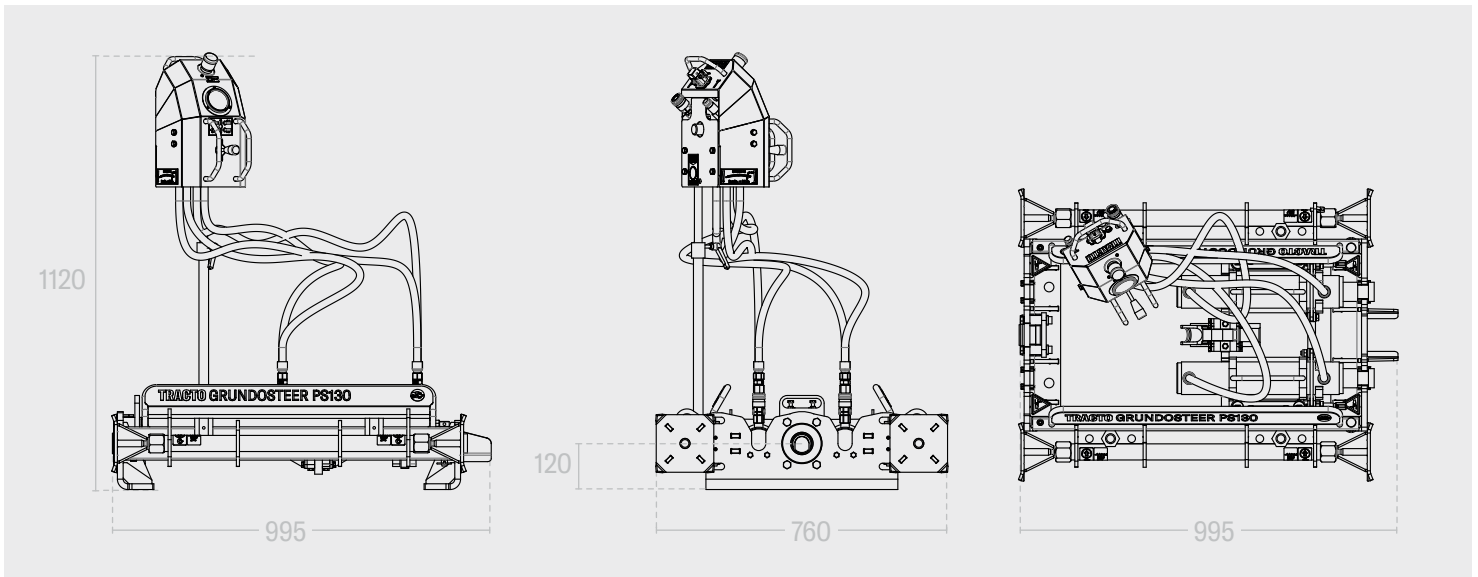
# GRUNDOSTEER PS130

## EASY TO HANDLE

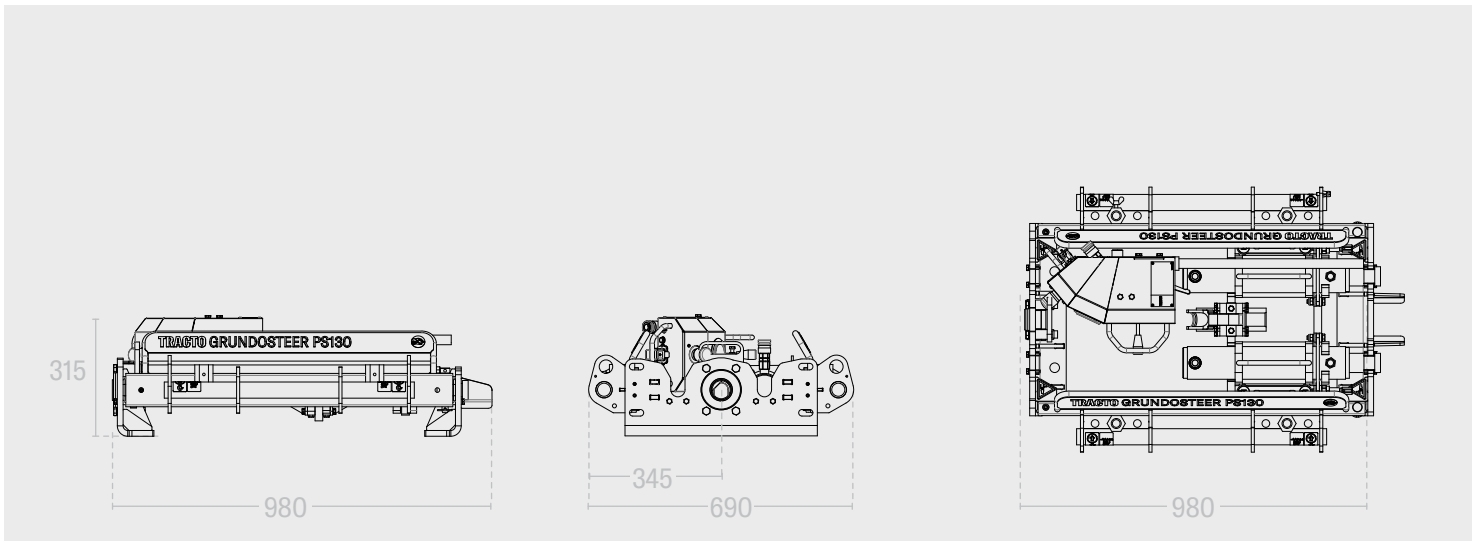
### FEATURES

- Start possible from small pits and from the cellar
- Energy-saving bracing in the pit
- Compact dimensions for uncomplicated use in confined spaces
- Drive via separate hydraulic power unit
- Easy handling and transport
- Easy assembly and disassembly
- Transport and handling can be carried out on a Euro pallet
- The machine can be dismantled into individual parts, meaning heavy equipment is not necessarily required for handling on the construction site

### WORKING POSITION



### TRANSPORT POSITION



## VARIANT

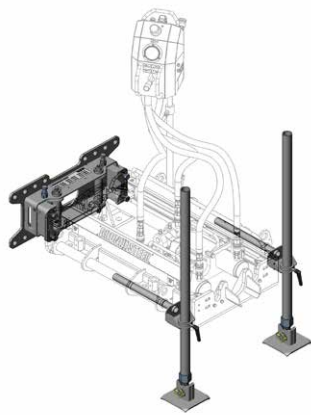


<b>TECHNICAL DATA</b>	<b>GRUNDOSTEER PS130</b>
Tensile/thrust force (kN)	130
Length x Width x Height (mm)	995 x 760 x 1120
L x W x H Dimensions of the rod box (mm)	565 x 530 x 525
Weight, rod box incl. 40 rods (kg)	approx. 275
Central axis (mm)	120
Weight of bore rig (kg)	170
Base frame individual parts (kg)	< 54
Rod weight (kg)	5.7
Rod Ø (mm)	45
Effective rod length (mm)	500
Pilot pressing Ø (mm)	58
Rod bending radius (m)	25
Max. pressing length (m)	25
Steering head Ø (mm)	58
Max. expander Ø (mm)	100
Max. new pipe Ø (mm)	75
Hydraulic operating pressure (bar)	172
Litre capacity hydraulics (l/min)	30

Errors and omissions excepted

## THE DECISIVE COMPONENTS

Accessories perfectly matched to the machine guarantee optimum advance in all displaceable soils. All parts are tough and durable as a matter of course.



WALL CONNECTION



SUPPORT FEET



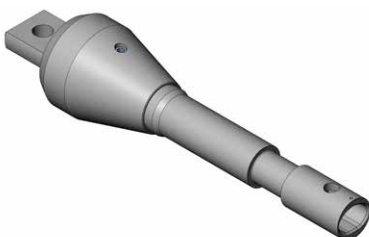
PIT BRACING ADAPTER



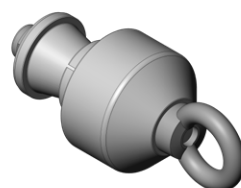
GRUNDOSCOPE AIMING FRAME WITH TELESCOPIC SIGHT



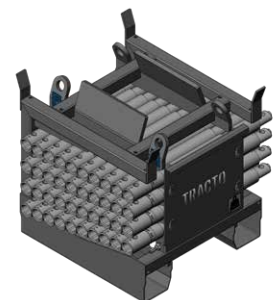
INTERCHANGEABLE CONTROL PLATES FOR SANDY AND SOFT SOILS



BACKREAMER



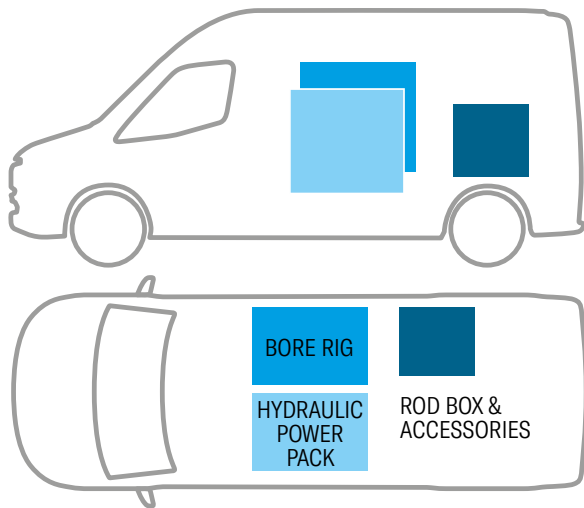
PIPE PULLER



ROD MAGAZINE



SYSTEM COMPONENTS



TRANSPORT CONCEPT

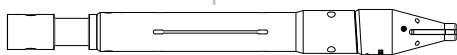


Picture similar

HYDRAULIC UNIT  
HYCON HPP 18V

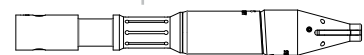


Depth display & position  
Inclination  
Rolling (time)



LOCALISATION TECHNOLOGY  
DCI FALCON F1

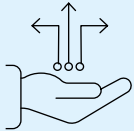
Depth display & position



LOCALISATION TECHNOLOGY  
VIVAX METROTECH VLOG 3 CAM

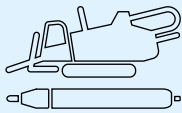
# FULL SERVICE FOR TRENCHLESS TECHNOLOGY

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.



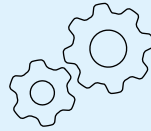
## Financing

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.



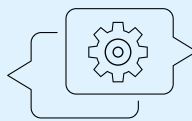
## Geoservice

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 and contact persons



TRACTO.COM/  
SERVICES





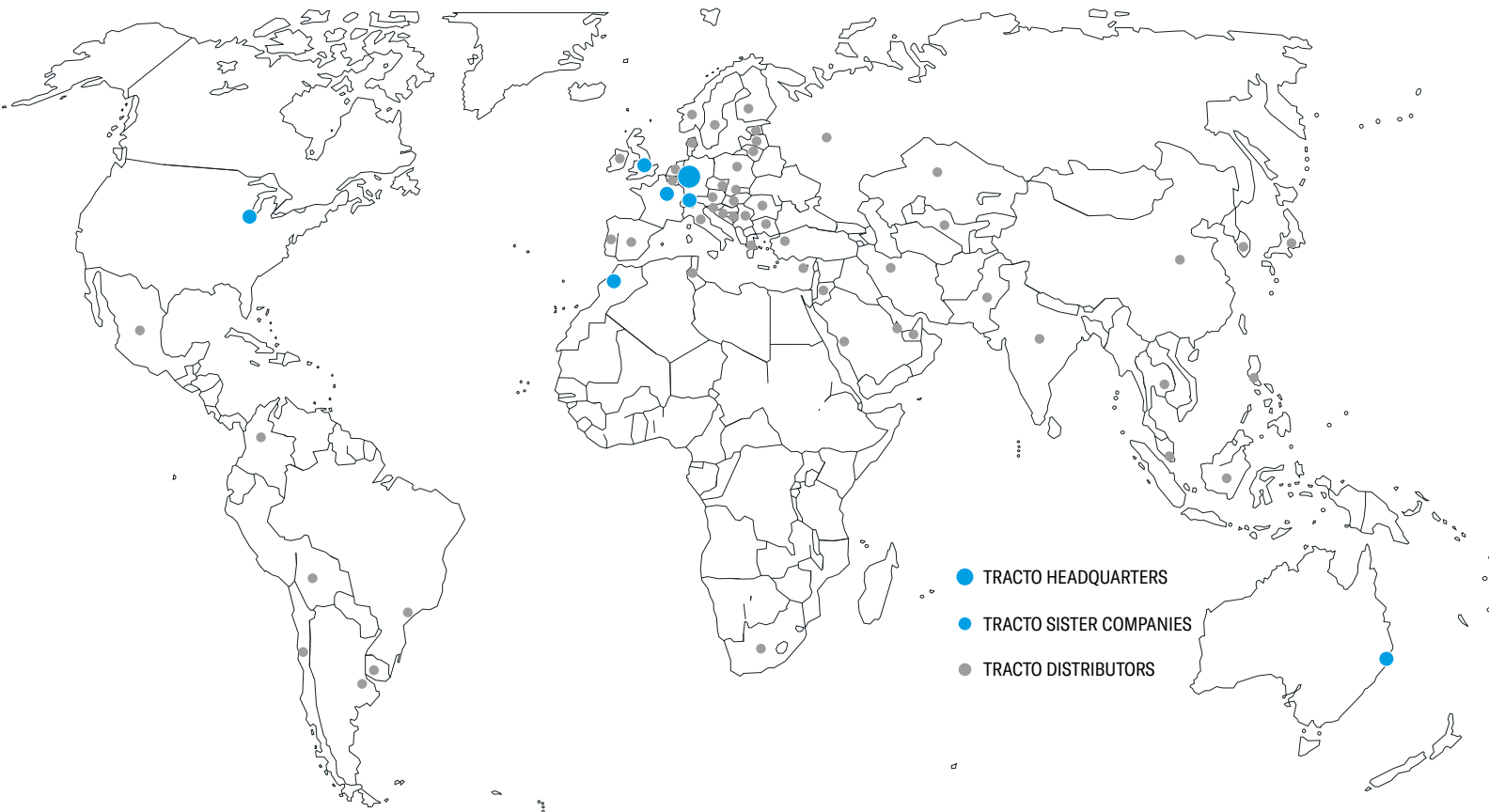


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ADVANCED TRENCHLESS TECHNOLOGY**

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