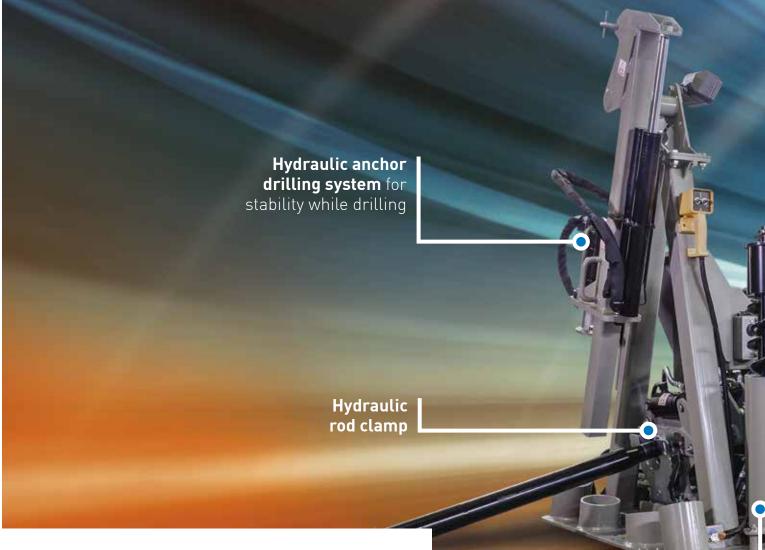
INSPIRING TRENCHLESS TECHNOLOGIES





GRUNDODRILL^{4X} Fluid-assisted HDD rig





COMPACT CATEGORY Consumes little, achieves a lot

ROTARY DRIVE



Compact high-performance rotary drive with rack and pinion.

CABLE-BASED REMOTE CONTROL



For simple and safe driving and positioning.

Rod magazine with a drill rod capacity of **32 rods for 48 m** High-capacity rotary drive with 1,300 Nm and 230 rpm Kubota diesel motor with 28 kW driving power

Compact design for working in the most confined spaces Rubberised steel track undercarriage - extreme off-road performance and stability **Stabilisors -** maximal self-support, variable inclination of the cradle for an optimal penetration angle

CONTROL STATION



With the clearly laid-out control panel and a multifunctional joystick.

SMART VICE SYSTEM



For a quick break-away of the drill rods at the push of a button.

OPEN PATH EVEN IN TIGHT SPOTS

Application

Thanks to its small footprint and limited weight, the compact and very manoeuvrable GRUNDODRILL^{4X} is particularly useful in confined spaces and poorly accessible terrains.

UNDERCROSSINGS

Directional drilling beneath roads, railway tracks and buildings.

- PARALLEL BORES
 Linear bores paralleling roads, water bodies and buildings.
- FLAT BORING
 Drilling close to the surface without elaborate excavation works.
- PROPERTY SERVICE CONNECTIONS
 For gas, water, electricity, sewerage, telecommunication, FTTH.



Drill rig and mixing system can be transported by pickup and trailer. Transportation: ■ Very easy ■ With the smallest machine ■ With minimal effort



Accessories

STANDARD DRILL TECHNIQUE



Rods D48 mm



Medium Soil Reamer





Cone Reamer



MIXING SYSTEMS



Bentonite mixing system: Type MA09-60 External drive with hydraulic power unit, Type TTM 9.11 kW driving power Floor space (L x W x H):1,400 x 1,380 x 2,055 mm



Bentonite mixing system: Type MA04 Integrated drive with Hatz diesel motor, 7 kW driving power Floor space (L x W x H): 1,824 x 1,168 x 1,143 mm

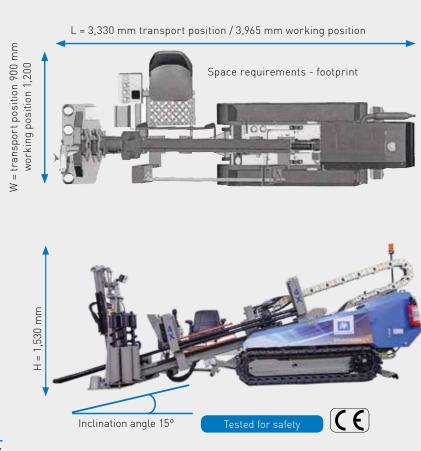




Basic equipment

GRUNDODRILL^{4X}

- Kubota diesel engine with 28 kW driving power
- Control station with easy to survey control panel
- 1 multifunctional joystick
- Hydraulic anchoring bore unit swivable to three positions
- Remote control
- Drill rod magazine with 32 drill rods for 48 m
- stabiliser, rubberised steel track undercarriage
- Rack and pinion feed drive



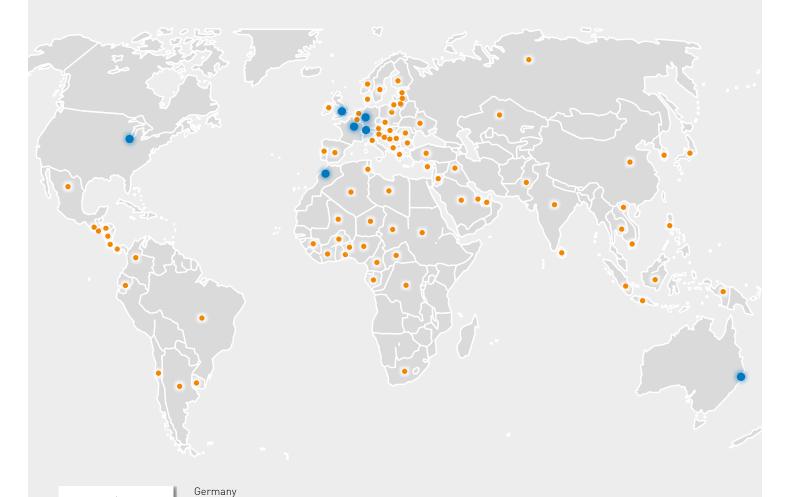


Performance data	Drill rod type: 4X
L x W x H (Working position) [mm]	3,965 x 1,200 x 1,530
Weight incl. rods [kg]	2,140
Rod magazine capacity [m]	48
Inclination angle	15°
Thrust and pullback force [kN]	43
Max. torque [Nm]	1,300
Max. spindle rotation [rpm]	230
Pilot bore Ø [mm]	80
Drill rod Ø [mm]	48/38
Effective rod length [mm]	1,500
Rod weight [kg]	9
Upsizing Ø* [mm]	≤ 250
Pipe OD* [mm]	≤ 160
Bore length* [m]	≤ 100
Min. bore radius [m]	25
Max. driving speed [km/h] two-step	2
Fresh water tank [l]	-
Sound pressure level L _{PA} [dB(A)]	82,5
Max. engine output [kW]	28
Diesel tank [l]	42

* depending on soil type

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TRACTO-TECHNIK worldwide





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