

INSPIRING TRENCHLESS TECHNOLOGIES



TRACTO-TECHNIK



**11XP** **URBAN  
EXPERT**

■ MADE  
■ IN  
■ GERMANY

GRUNDODRILL<sup>11XP</sup>  
Fluid-assisted HDD rig



**Comfortable swivelling cabin**, maximum operator comfort and convenience, clearly arranged with flexible positioning

**Fully automatic rod exchange** in only 35 seconds ensuring short idle times and uniform wear of all rods

**Anchoring system** for increased stability while drilling and **minimal rod wear**

Integrated **high-pressure cleaner**  
Convenient quick-cleaning

## LOCAL HERO

Slender, manoeuvrable, economical

**Collecting tray** for Bentonite with Bentonite suction pump as an option



### EXTREMELY SLENDER & FLEXIBLE

- Slenderly built, with the smallest space in its class between the drill axis and the outer edge of the machine.
- Perfect for drilling in limited spaces, i.e. in inner city areas.
- Convertable for cable-guided bores for tracking in challenging terrains and great depths.





**Large GFRP service hood –**  
easily accessible for  
service and maintenance

**Robust undercarriage with steel tracks**  
extremely mobile and self-supporting



#### BEST-IN-CLASS PEAK PERFORMANCE



- The highly efficient motor technology operates economically, with low noise and emission levels.
- The Bentonite pump conveys 115 (180) l/min and allows high speed and great at expanding diameters while reaming is in operation.

#### ADDITIONAL IMPACT FORCE



- Optionally available impact unit for additional dynamic driving energy of the pilot bore.
- Guarantees good progress and steerability in rocky soils at least up to grade 5.





## GROUND CONTROL

Full vision, maximum comfort



### OPTIMAL OPERATOR'S POSITION

The glazing configuration of the operator's cabin offers a panoramic view of the surroundings. The operating elements are clearly arranged and all functions and drilling parameters can be controlled without a problem via interactive control.

- Control panel
- Industrial computer with internet access
- Display with optional traction force measurement
- Data storage acc. to the latest standards, printing via PC
- Recording of the complete drilling course data
- Remote diagnosis with telemetry data transfer
- semi-automatic rod exchange system
- semi-automatic clamp and break-away facility





#### **TOTAL EASE OF USE**

All functions are controlled by two multifunctional joysticks.

#### **CUSTOMISED ERGONOMICS**

The comfortable seat is air-sprung and can be adjusted individually.





# EARNs ITS REPUTATION FROM THE FIRST METRE ON

## Application

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

### ■ UNDERCROSSINGS

The standard applications with the GRUNDODRILL include directional drilling operations beneath roads, railway tracks and buildings.

### ■ LONGITUDINAL BORES

Not only undercrossings, but also linear drilling operations which course parallelly to roads, water bodies and buildings, are all common applications.

### ■ CABLE-GUIDED DRILLING

When detection of the bore is especially demanding, cable guided drilling is applied, e.g. for deep boreholes, crossings underneath water bodies or railway tracks or when interferences occur.

## The fluid-assisted HDD method

### PILOT BORE\*



#### Implementing of the planned bore path:

- Linear bores: pushing and rotation of the bore head.
- Curved bores: pushing of the aligned bore head, supported by paddle mode/impact unit if required.

### UPSIZING & PIPE PULLING\*



#### Installation of the product/protection pipe:

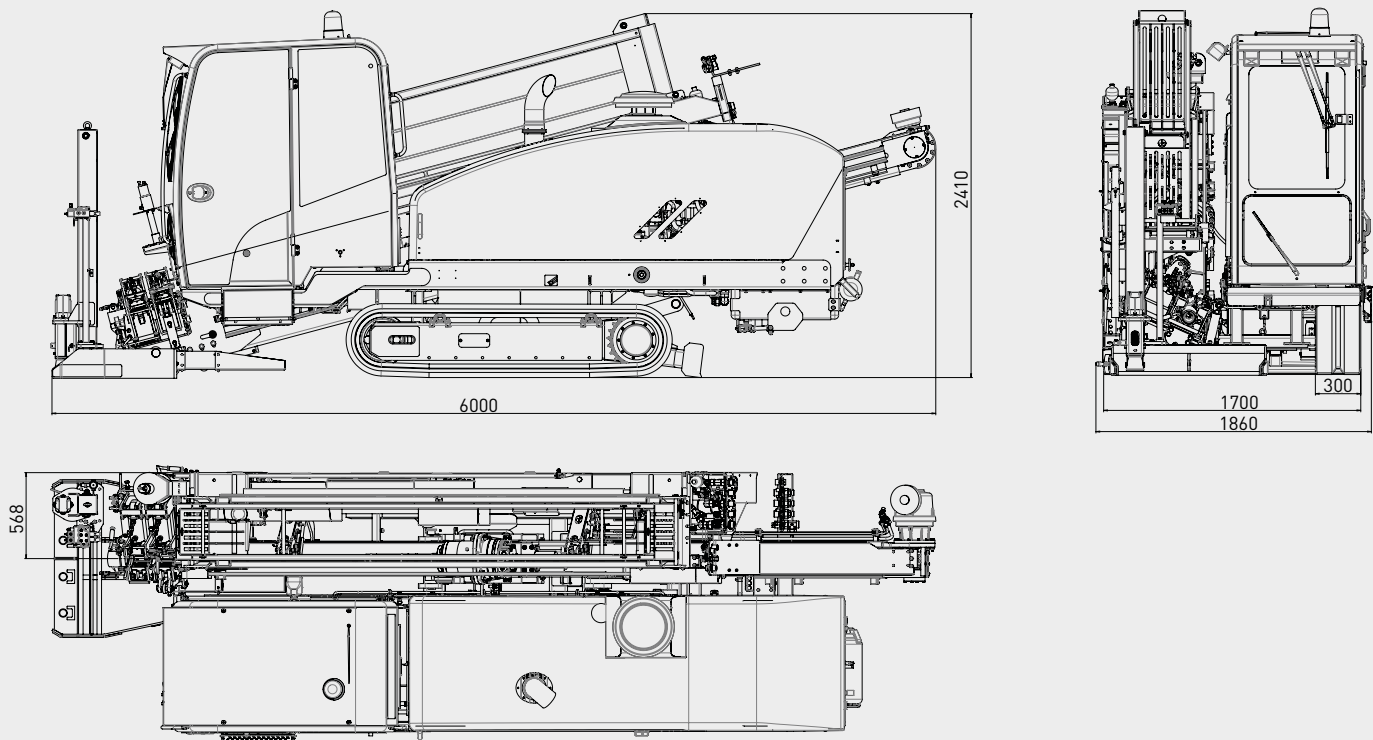
- Reverse pulling of the backreamer with pipe attached, intermediate upsizing may be necessary.

\* Depending on soil grade and required upsizing diameter special drilling tools are used.

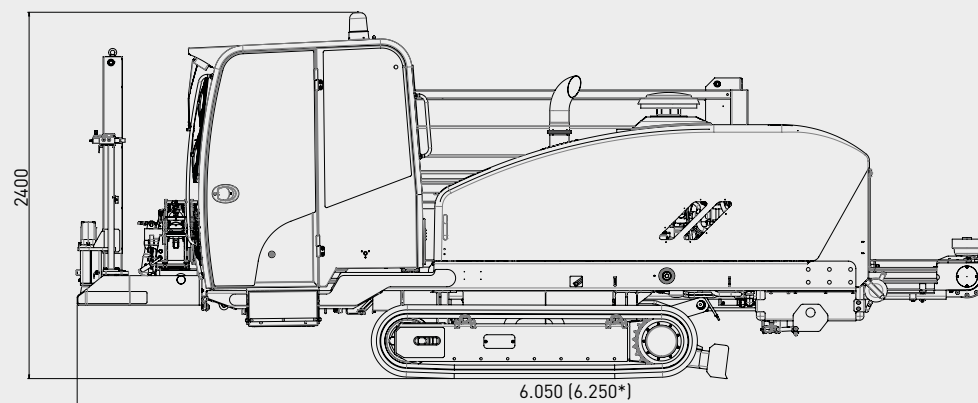


# TECHNICAL DATA GRUNDODRILL<sup>11XP</sup>

## WORKING POSITION



## TRANSPORT POSITION



# TECHNICAL DATA



## Model

GRUNDODRILL<sup>11XP</sup>

### Basic equipment

- Cummins motor Tier 4 final, Stage IV for driving and drilling, 119 kW
- Drill rig with rubber track undercarriage, stabilisor
- wireless remote control
- spacious cabin, comfortable seat, joysticks, monochrome display
- automatic bore mode
- fully galvanised rod box
- semi-automatic rod exchange system
- semi-automatic clamp and break-away facility
- Anchoring system with drilling fluid collecting tray
- powerful HP Bentonite pump on board the rig
- Bore data logging – data transfer
- High-pressure cleaner
- Optional: fully automatic system, hammer mechanism, rubberised steel track undercarriage, air conditioning

### Performance data

Drill rod type: TD61

L x W x H [mm]	6.050 (6.250*) x 1.700 x 2.400
Weight incl. rods [kg]	7.900
<b>Rod magazine capacity [m]</b>	<b>132</b>
Inclination angle	11° - 20°
<b>Thrust and pullback force [kN]</b>	<b>105</b>
<b>Max. torque [Nm]</b>	<b>3.300</b>
Max. spindle speed [rpm]	200
Pilot bore Ø [mm]	100
Drill rods Ø [mm]	62/54
Effective stem length [mm]	3.000
Rod weight [kg]	26
<b>Upsizing Ø** [mm]</b>	<b>≤ 400</b>
<b>Outer Pipe Ø** [mm]</b>	<b>≤ 355</b>
<b>Bore length** [m]</b>	<b>≤ 250</b>
Min. bore radius [m]	<b>33 NEW</b>
Max. driving speed [km/h] 2stage	2 / 4
Fresh water tank [l]	100
<b>Sound pressure level L<sub>PA</sub> [dB(A)]</b>	<b>74.8</b>
<b>Sound power level L<sub>WA</sub> [dB(A)]</b>	<b>97.1</b>
<b>Max. engine output [kW]</b>	<b>119</b>
<b>HP Bentonite pump [l/min]</b>	<b>115 (180)</b>
Whole body or Hand / Arm vibrations [m/s <sup>2</sup> ]	< 0,5
Diesel tank [l]	120

\* with fully automatic option \*\* soil-dependent



# THE MAINSPRING OF SUCCESS



## Accessories

### STANDARD DRILLING TECHNIQUE



TD61 rods



Medium Soil Reamer



Cone Reamer



GRUNDOREAM

### MIXING SYSTEMS



Mixing system MA010



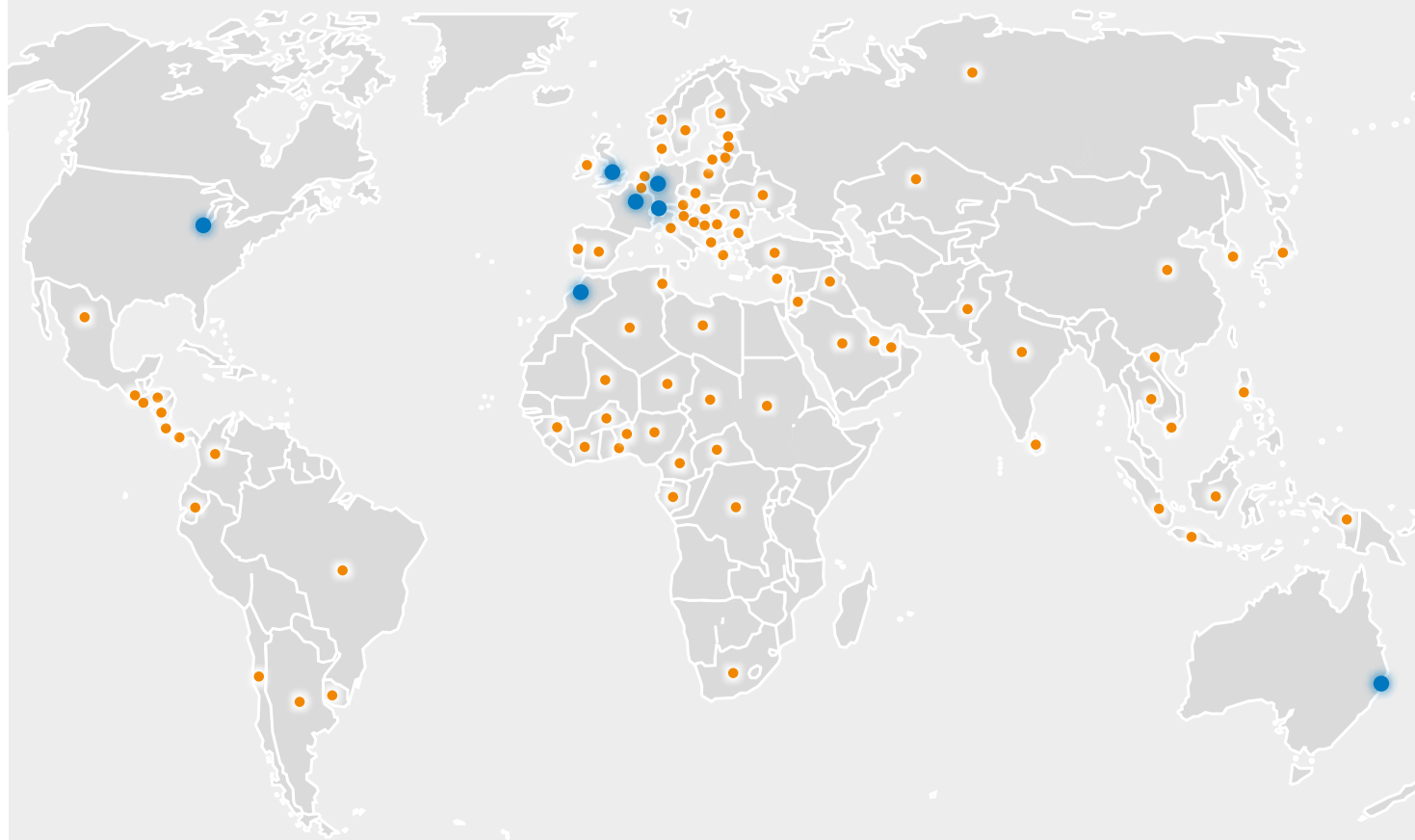
Truck platform



Truck platform

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