

INSPIRING TRENCHLESS TECHNOLOGIES



TRACTO-TECHNIK



18ACS KING OF ROCK

■ MADE
■ IN
■ GERMANY

GRUNDODRILL^{18ACS}
HDD Rock drilling rig



Integrated **high-pressure cleaner**
Comfortable cleaning

Hydraulically pivotable cabin, operator-convenient,
clearly arranged, can be flexibly positioned

Large rod magazine
up to 225 m **on board**

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

Bentonite collecting tray
optionally with Bentonite suction pump

TRAILBLAZER

Makes an impact in all soils

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

IDEAL POWER RATIO



Drive slide with rack and pinion:

- Stepless adjustment of torque and revolution speed for optimal power transmission.
- Best possible adaptation to demands and soil conditions.

RODS FOR EVERY PURPOSE



- Rods TD73 and TD82 for fluid-assisted drilling.
- Twin-tube rods Elicon 95 for rock drilling.
- Quick conversion from fluid-assisted to rock drilling.



Large GFRP hood
easily accessible for service
and maintenance

**Motor with the highest
output of its class** – low fuel
consumption, low noise and
emission levels

**High-performance
Bentonite pump**
for rapid reaming
speed and large
reaming diameters

**Broad undercarriage
with rubberised steel
tracks** – extremely
mobile and self-supporting



LIGHTNING-FAST ROD EXCHANGE

- The fully automatic system ensures short idle times and an equal wear of all rods in the magazine.
- The crane on board facilitates simple handling of the rods, stacking boxes and add-on parts.

CABLE-GUIDED DRILLING

- The GRUNDODRILL 18ACS has the option to be converted for cable-guided bores when drilling in challenging terrain and at great depths (picture on the left).



GROUND CONTROL

Full vision, maximum comfort



OPTIMAL OPERATOR'S POSITION

The glazing 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 difficulty via interactive control.

- panel PC with touchscreen and internet access
- High-resolution colour screen with optional online traction force measurement
- Display with optional tensile load measuring
- Data log acc. to the latest standards, printing via PC, USB port
- Recording of the complete drilling course data
- Remote diagnosis with telemetric data transfer
- automatic bore mode
- fully automatic rod exchange system
- fully automatic clamp and break-away facility



TOTAL EASE OF USE

All functions are controlled at the push of a button with two multifunctional joysticks.



CUSTOMISED ERGONOMICS

The comfortable seat is spring-mounted and can be adjusted individually.

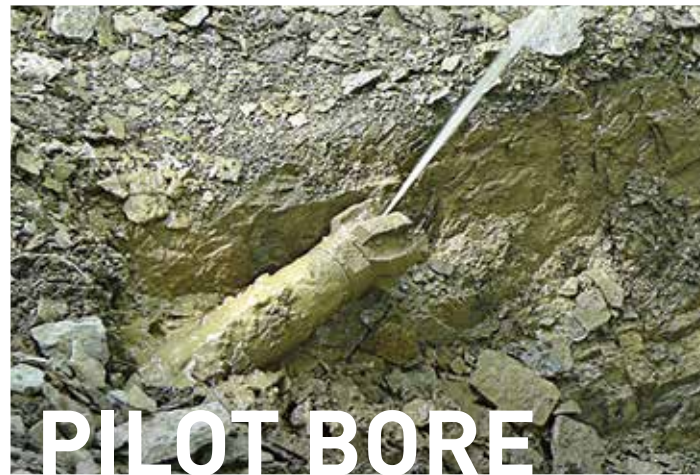




OFF-ROADER



ROCK B



PILOT BORE



MOVING TRAFFIC



REAKER



PIT WORKER



PULLING BACK



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.

■ ROCK BORES

The GRUNDODRILL^{18ACS} is perfectly capable of drilling in all tough geological conditions, especially in firm rocky formations. For these specialised operations, the Elicon 95 twin-tube rods and the Rock-breaker with roller bits or PDC take on the job.

■ UNDERCROSSINGS

Directional drilling beneath roads, railway tracks and buildings are all standard applications with GRUNDODRILL.

■ LONGITUDINAL BORES

Not only undercrossings, but also linear drilling operations which take a parallel course to roads, water bodies and buildings, are also routine 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 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.

GOOD PLANNING IS HALF THE DRILL



Accessories

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

STANDARD DRILLING TECHNIQUE



TD73 and TD82 rods



Medium Soil Reamer

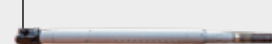


Cone Reamer



GRUNDOREAM

ROCK DRILLING TECHNIQUE



ELICON 95
Twin-tube rods



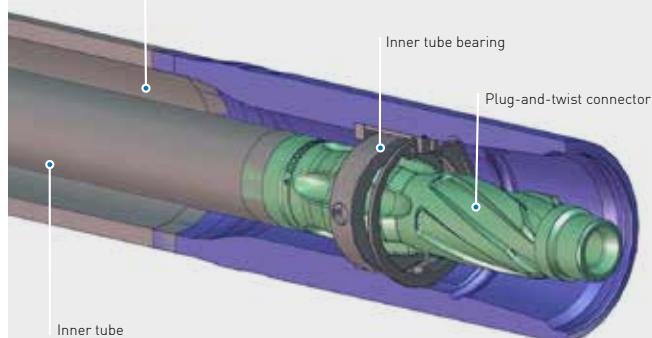
Hard Soil Reamer



Hard Soil Rockreamer



Holeopener



ELICON 95 TWIN-TUBE RODS

The inner tube, is bedded inside the outer tube by means of wear elements. The inner tubes are simply, quickly and securely connected using plug-and-twist connectors.

Maintenance-free
rotary supplying up
to 1800 l/min

870 l/min fresh
water filter



FULL SUPPLY

Bentonite funnel with
marking grid for 50 kg
Bentonite, processes
25 kg of Bentonite in
only 25 seconds.



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 job completion – even in complex and alternating 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.

For more information on this important topic, visit our website for more information on in-house training courses or ask for detailed information on mixing systems and truck platforms.



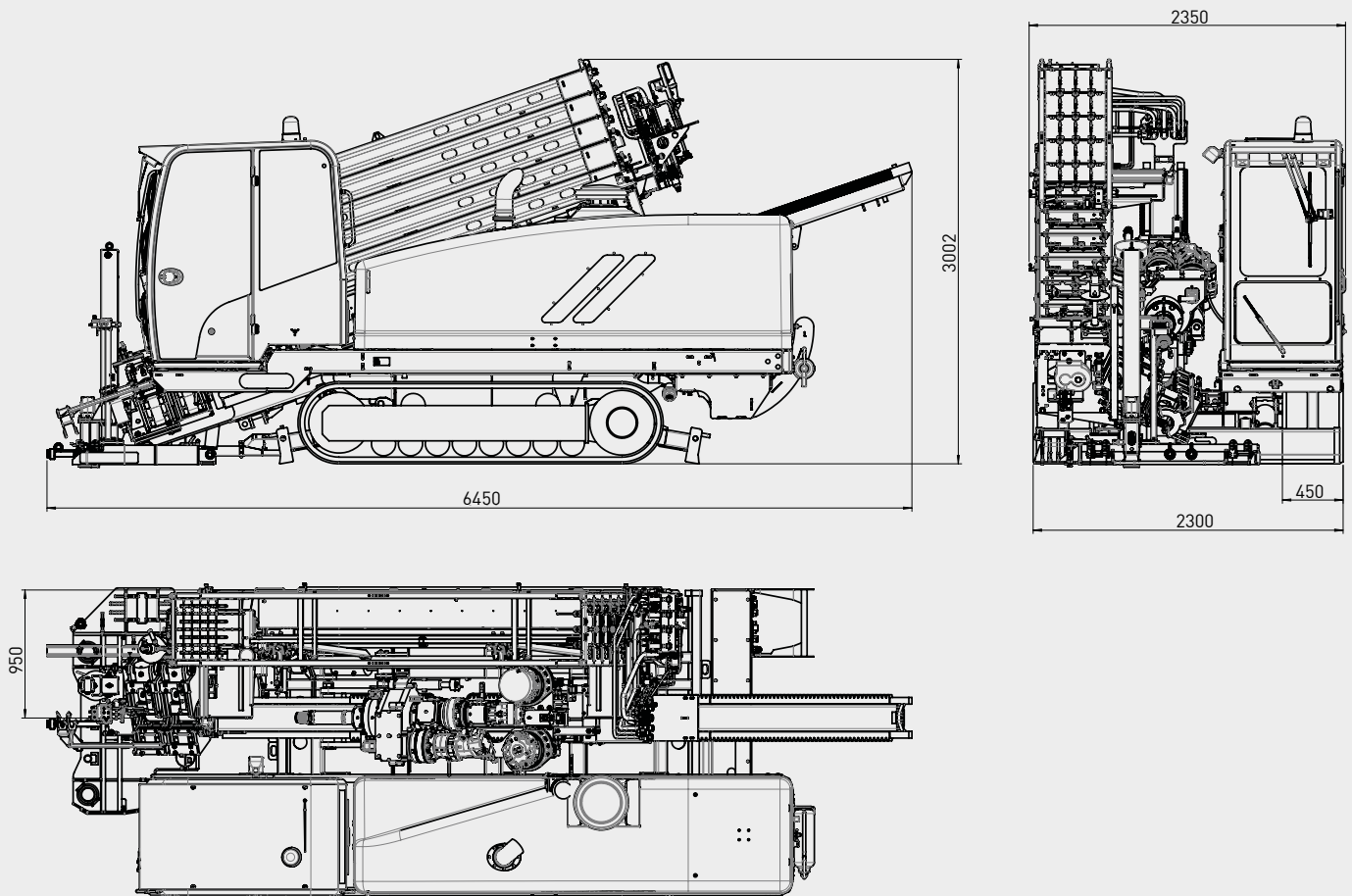
Mixing system MA07



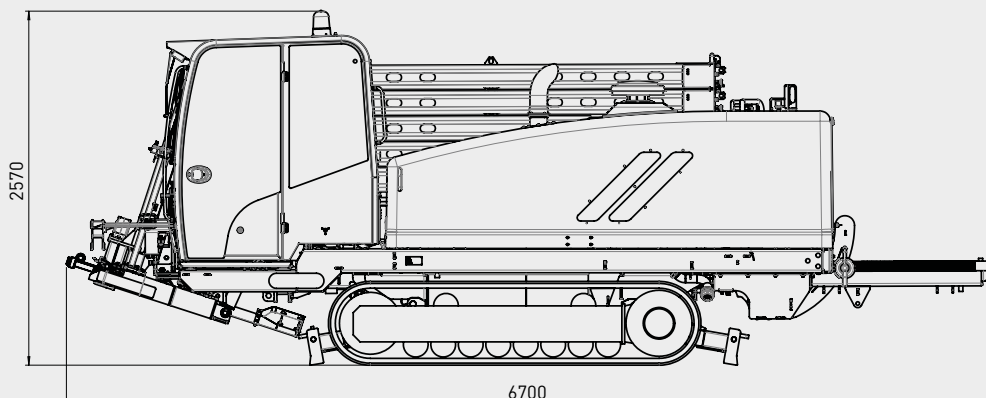
Mixing system MA010

TECHNICAL DATA GRUNDODRILL^{18ACS}

WORKING POSITION



TRANSPORT POSITION



TECHNICAL DATA



Model

GRUNDODRILL^{18ACS}

Basic equipment

- Cummins motor Tier 4 final, Stage IV for driving and drilling, 119 kW
- infinitely variable torque adjustment rotation for maximum drilling capacity across the entire speed range
- Drill rig with rubber track undercarriage, stabilisers
- wireless remote control
- spacious cabin, comfortable seat, joysticks, panel PC with touchscreen, air conditioning
- automatic bore mode
- fully automatic rod exchange system
- fully 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: with drill rod type TD73 or TD82 (technical. data see GRUNDODRILL^{18N})

Performance data

	Drill rod type: Elicon 95 (rock)	Drill rod type: TD73 · TD82
L x W x H [mm]	6.700 x 2.300 x 2.570	6.700 x 2.300 x 2.570
Weight incl. rods [kg]	15.200	14.350
Rod magazine capacity [m]	120	225 · 210
Inclination angle	12°–30°	12°–30°
Thrust and pullback force [kN]	180	180
Max. torque (outer tubes) [Nm]	7.500	7.500 · 10.000
Max. torque (inner tubes) [Nm]	2.500	-
Max. spindle speed (outer tubes) [rpm]	200	200
Max. spindle speed (inner tubes) [rpm]	350	-
Pilot bore Ø [mm]	165	115 · 140/170
Drill rod Ø [mm]	98/95	73/63 · 82
Effective rod length [mm]	3.000	3.000
Rod weight [kg]	80	42 · 46
Upsizing Ø* [mm]	≤ 600	≤ 600
Outer pipe-Ø* [mm]	≤ 500	≤ 500
Bore length* [m]	≤ 400	≤ 400
Min. bore radius [m]	55	55 · 60 NEW
Max. driving speed [km/h] 2stage	3,3/5	3,3/5
Fresh water tank [l]	130	130
Sound pressure level L_{PA} [dB(A)]	64.9	64.9
Sound power level L_{WA} [dB(A)]	96	96
Max. Engine output [kW]	119	119
HP Bentonite pump [l/min]	320 (400)	320 (400)
Whole body or Hand / Arm vibrations	< 0,5	< 0,5
Diesel tank [l]	180	180

* depending on soil conditions



TRANSPORTATION WITH A PLAN



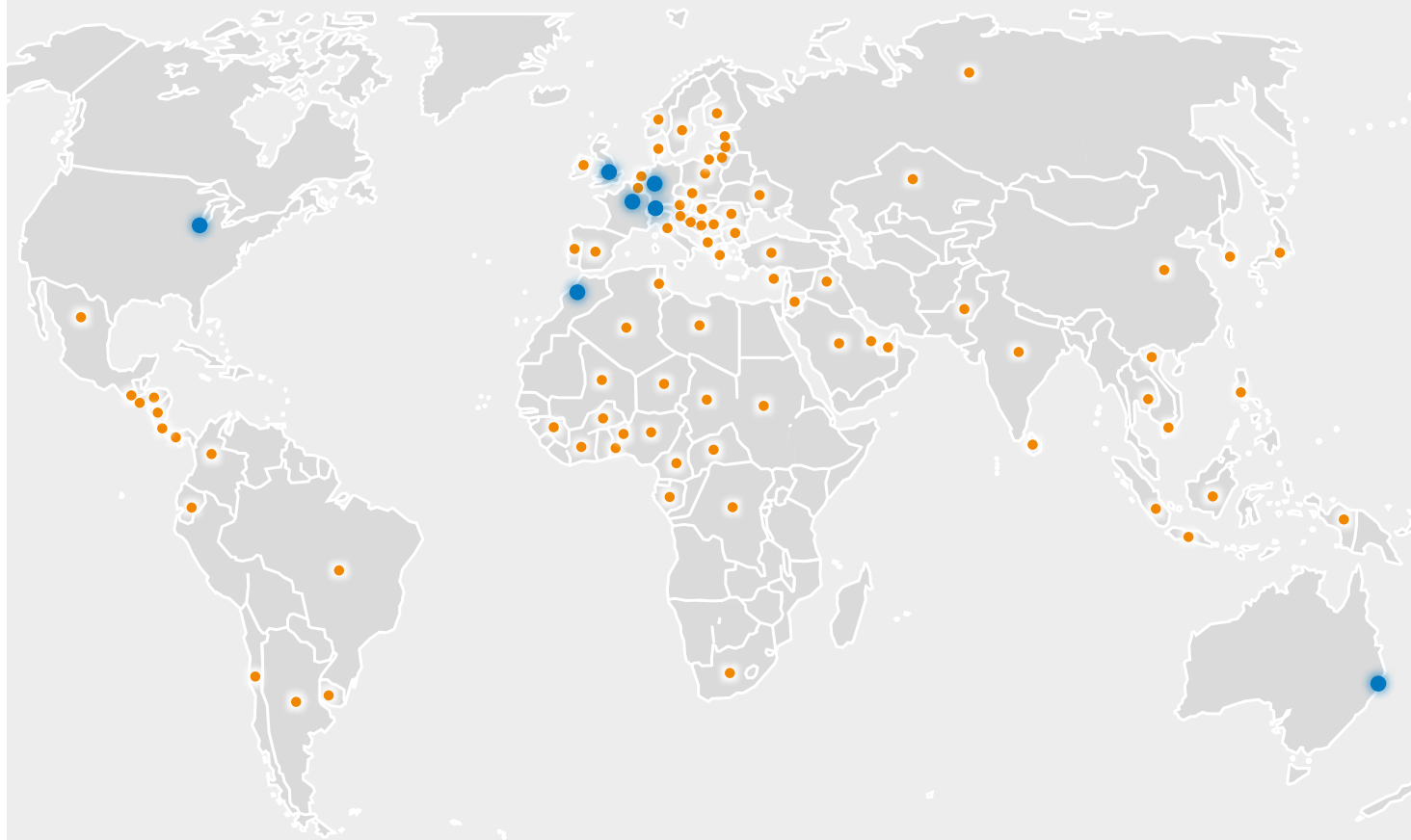
Everything is on board: truck platform for mixing systems, drive and accessories.



Stacking boxes for the ELICON 95 double pipe rods.

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worldwide



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