

# Horizontal Directional Drill TERRA-JET DJ 40

Swiss made





# TERRA-JET DJ 40

## Horizontal Directional Drill

### 189 HP STRONG PERKINS DIESEL ENGINE

Built from our customer's feedback and input, the **DJ 40** is a modern evolution of productive and enhanced horizontal directional drill units designed by TERRA.

Powered by a proven **189 HP** strong PERKINS Diesel engine (Euro Stage 5) the **TERRA-JET DJ 40** offers up to **18 tons** of thrust and pullback force, **8.000 Nm** of rotational torque and a maximum spindle speed of **255 rpm**.

A combination you need for outstanding productivity on big installation jobs, to work more efficiently with less downtime.





## WIRELESS REMOTE CONTROL

The installation and driving of the **DJ 40** is done by a wireless remote control. This leads to a faster job site set-up.



## ONBOARD FLUID PUMP (510 L/MIN)

The onboard, enclosed **510 l/min** strong fluid pump leads to productive drilling at greater distances. The flow rate can be adjusted simultaneously with thrust, pullback and rotation. A sensor measures the flow rate continuously. If the tank is empty, the sensor closes the valve which leads to a long lifetime of the seals inside the fluid pump.





## AUTOTORK (PATENT)

The bent axis variable displacement motor of the driving saddle creates the high torque. The torque of **8.000 Nm** and the drill rod rotation speed of **255 rpm** can be adjusted manually. In total there are 11 gears. The operator regulates them easily on the display of the cabin (AutoTork).

## DRILLING ASSISTANT SYSTEMS

Intelligent drilling assistant systems like the **thrust control**, **carve mode** and the **drill speed control** make the drilling more efficient and easier. The operator can relax, the machine does the work. The electronical drilling and backreaming system **ADBSe** adjusts the pulling speed within milliseconds.

## RACK AND PINION

Thrust and pullback of the driving saddle are carried out via rack and pinion drive. This is reliable and powerful. Two radial piston motors move the driving saddle (**18 tons**).

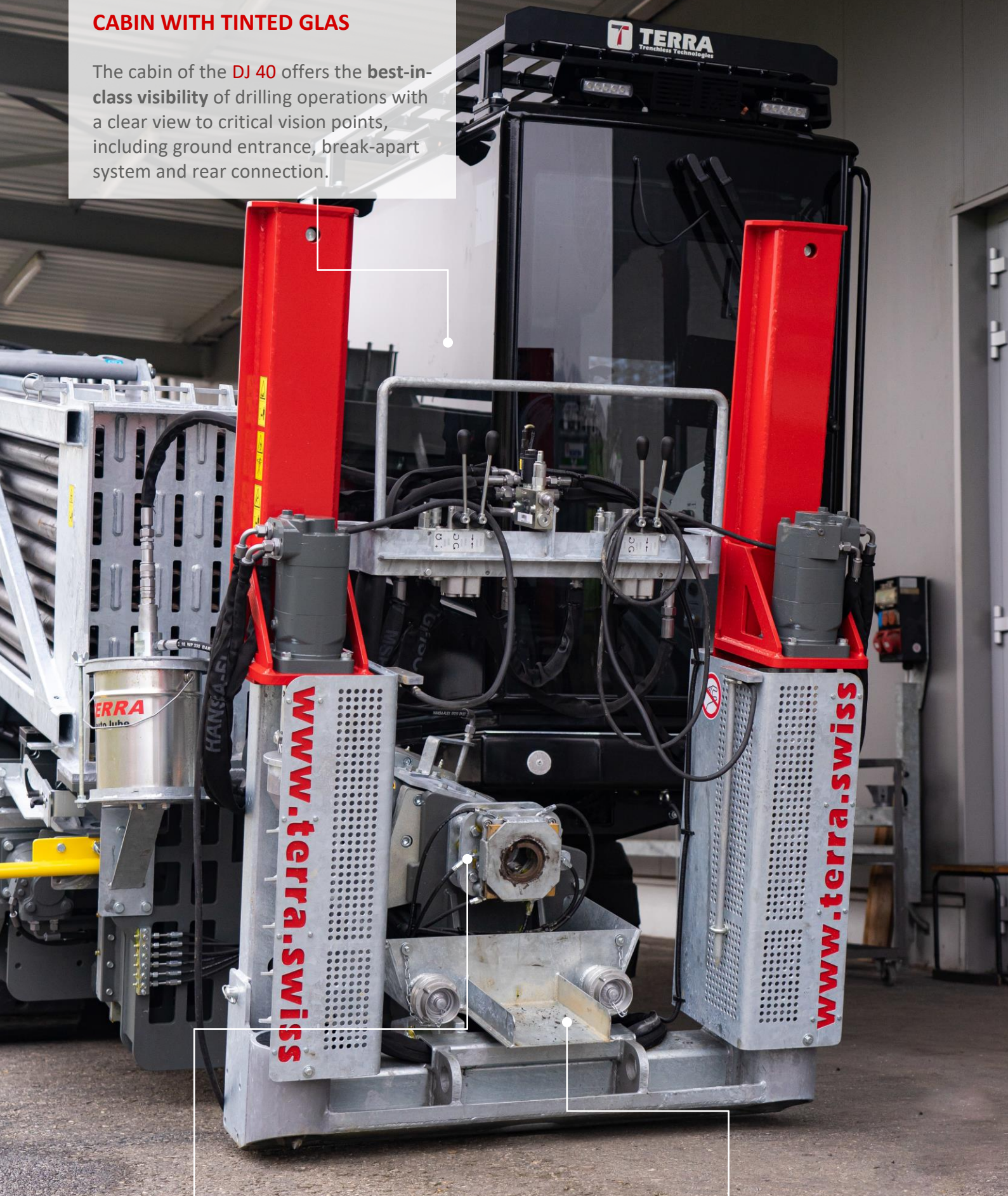
## DRILL ROD MAGAZIN WITH ADD-A-PIPE DESIGN

The **DJ 40** has **50 drill rods** on board, each 4.57 m long. This adds up to a total drill length of **230 m**. For higher productivity you refill the magazine with a unique add-a-pipe system or you just exchange the empty drill rod magazine against a full one. The bending radius of the premium drill rods is **34 m**.



## CABIN WITH TINTED GLAS

The cabin of the **DJ 40** offers the **best-in-class visibility** of drilling operations with a clear view to critical vision points, including ground entrance, break-apart system and rear connection.



## CABLE GUIDED DRILLING (WIRELIN)

The **DJ 40** is pre-equipped for cable guided drilling. The break-apart system is big enough to lay drill heads of wireline-systems into it.

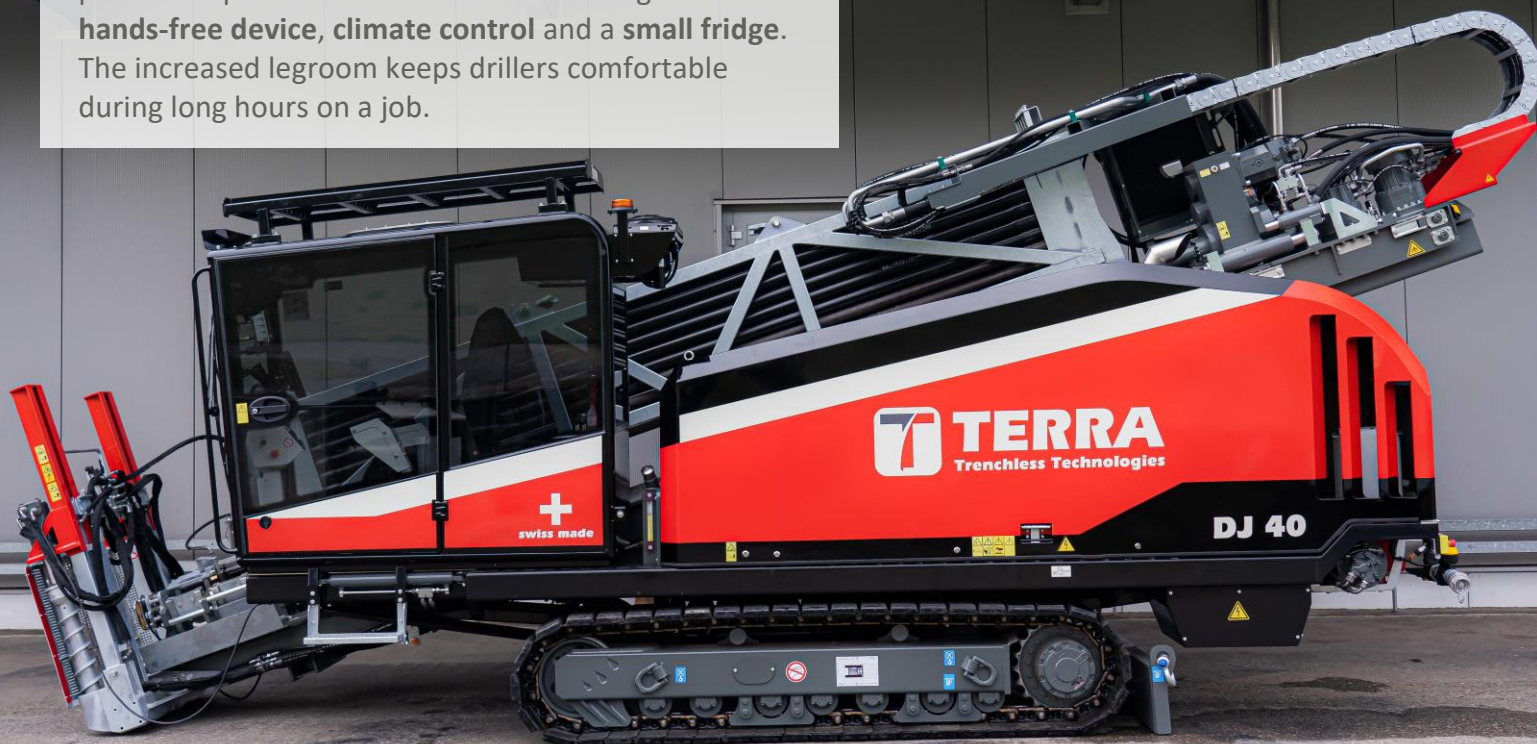
## BENTONITE COLLECTING TRAY (PATENT)

The bentonite is collected over a three-stepped collecting tray system. Your machine stays clean which leads to a higher safety of your jobsite.



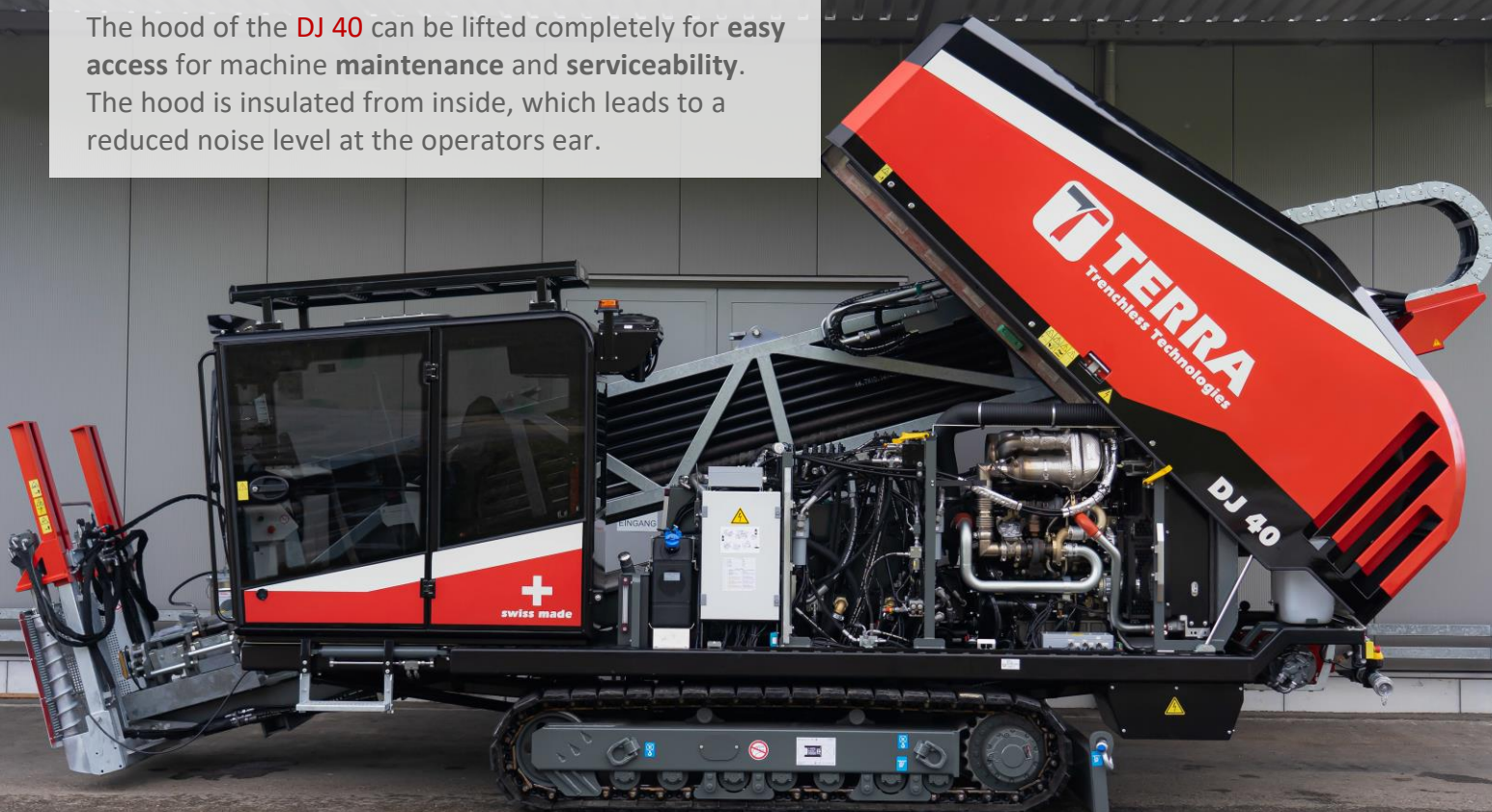
## CABIN WITH HANDS-FREE DEVICE

The **DJ 40** has a fully enclosed cabin which offers premium operator comfort such as an integrated **hands-free device**, **climate control** and a **small fridge**. The increased legroom keeps drillers comfortable during long hours on a job.



## EASY ACCESS AND SERVICE FRIENDLY DESIGN

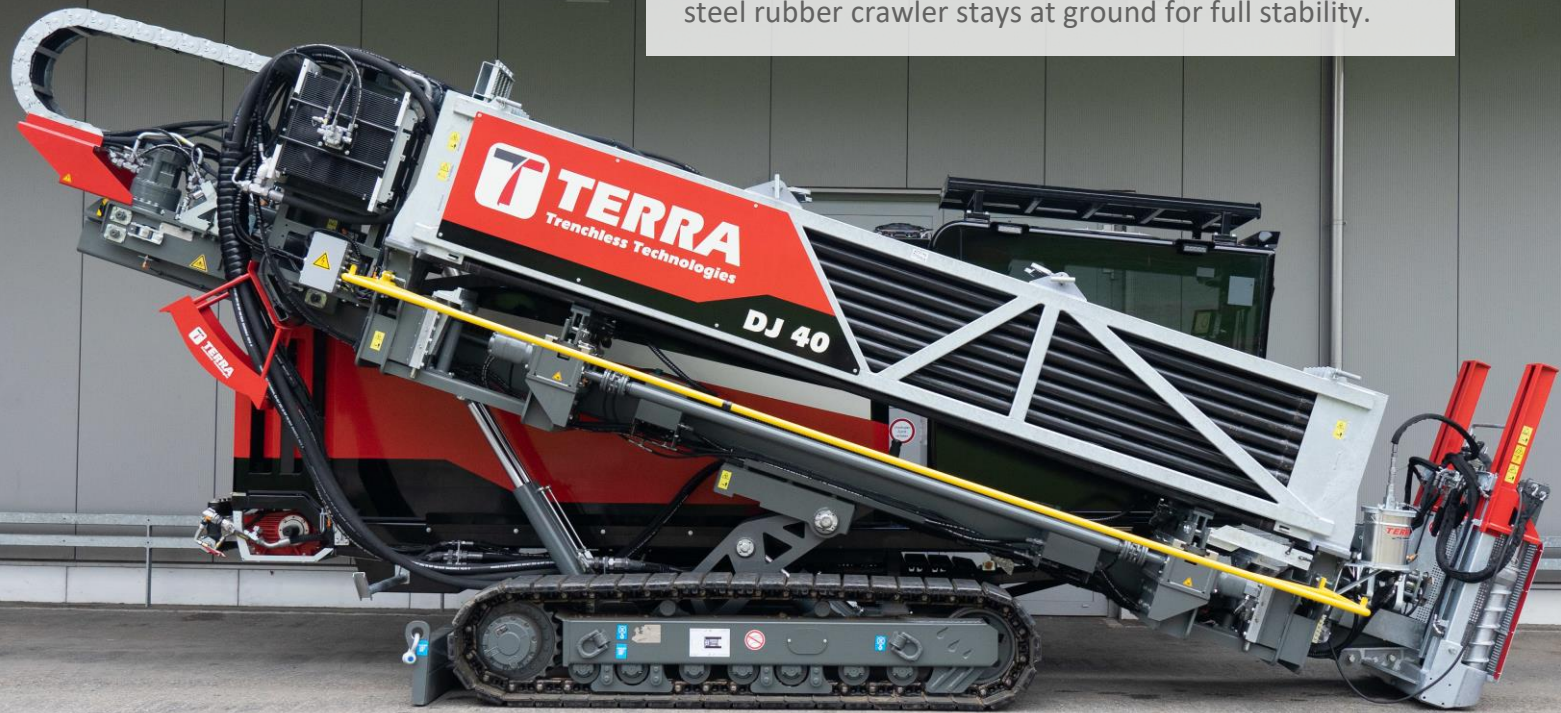
The hood of the **DJ 40** can be lifted completely for **easy access** for machine **maintenance** and **serviceability**. The hood is insulated from inside, which leads to a reduced noise level at the operators ear.





### OSCILLATING DRILL RAMP (PATENT)

The DJ 40 is equipped with an oscillating drill ramp. The drill ramp can move from 19% - 38% (11° - 20°). The steel rubber crawler stays at ground for full stability.



### SWING-OUT CABIN (HYDRAULICALLY)

The cabin of the DJ 40 can be moved hydraulically from 0° - 45°, even if the operator is in the cab. This industry-leading cab places the operator at a precise angle, providing an enhanced view of drilling operations.





# TERRA-JET DJ 40

## Technical Specification

|   | METRIC               | IMPERIAL (U.S.)      |
|---|----------------------|----------------------|
| Thrust force  | 181 kN (18 t)        | 40.000 lbs           |
| Pullback force  | 181 kN (18 t)        | 40.000 lbs           |
| DIESEL engine PERKINS Euro Stage 5                        | 139 kW (189 HP)      | 139 kW (189 HP)      |
| Spindle torque, max.                                      | 8'000 Nm             | 5.900 ft.lbs         |
| Spindle speed, max.                                       | 255 rpm              | 255 rpm              |
| Adjustable gears for rotation and torque (AutoTork)       | 11                   | 11                   |
| Drilling fluid volume, max.                               | 510 l/min            | 135 gpm              |
| Drilling fluid pressure, max.                             | 70 bar               | 1.015 psi            |
| Carriage thrust travel speed, max                         | 44 m/min             | 145 ft/min           |
| Ø pilot bore  | 140 – 170 mm         | 5,5" – 6,7"          |
| Minimum inclination of the drill ramp                     | 11° (19 %)           | 11° (19 %)           |
| Maximum inclination of the drill ramp                     | 20° (36 %)           | 20° (36 %)           |
| Backreamer diameter, max. *                               | 800 mm               | 30"                  |
| Maximum drilling length *                                 | 400 m                | 1250 ft              |
| Drill rods, length  | 4.5 m                | 15 ft                |
| Drill rods, diameter                                      | Ø 79/67 mm           | Ø 3,1" / 2,6"        |
| Bending radius, min.                                      | 34 m                 | 115 ft               |
| Driving speed   | 3.2 km/h             | 2.3 miles/h          |
| Operator sound pressure                                   | 75 dB (A)            | 75 dB (A)            |
| Exterior sound power                                      | 104 dB (A)           | 104 dB (A)           |
| Dimension L x W x H (transportation position)             | 8.23 x 2.18 x 2.84 m | 26 x 7,2 x 6,5 ft    |
| Dimension L x W x H (working position)                    | 8.14 x 2.18 x 3.68 m | 26,7 x 7,2 x 12,1 ft |
| Dimension L x W x H (driving position)                    | 8.44 x 2.18 x 2.88 m | 27,6 x 7,2 x 9,4 ft  |
| Weight including cabin, rear blade and 50 drill rods      | 16'500 kg            | 36.000 lbs           |
| Weight including cabin and rear blade, without drill rods | 13'550 kg            | 29.800 lbs           |

\* All data depending on ground conditions. Technical Data may change without prior notice.

## TERRA – always one drill ahead!



### PREMIUM DRILLING TOOLS

High quality drilling tools and reamers are available for all ground conditions. They are designed and produced inhouse at TERRA to maintain peak performance.



### DCI LOCATING EQUIPMENT

TERRA is an official dealer of DCI. With the new Falcon system even challenging ground conditions with high interferences can be successfully done.



### MIXING SYSTEMS

The mixing systems from TERRA allow a fast and efficient mixing of the drilling volume. They are quiet, easy to handle and offer a high capacity of your drilling volume.



### CUSTOMER SERVICE

Satisfied clients worldwide and a great customer service are the result of our constant progress. The TERRA-JET Directional Drill is a must have for every contractor!