



# STREICHER

## FUTURE-FOCUSED EQUIPMENT

### HDD-E SERIES

Fully Electric Driven Horizontal Drilling Rigs



- Quiet
- Eco-friendly
- Safe
- Powerful
- Future-focused

[www.streicher-ecotec.de](http://www.streicher-ecotec.de)





# STREICHER ECOTEC PRODUCTS – PROVEN IN PRACTICE AND FUTURE-FOCUSED

A real alternative to conventionally operated drilling rigs – these are the ecotec products from STREICHER.

Horizontal drilling rigs are used for trenchless laying of conduits and cables. STREICHER has completely re-designed the previous diesel-hydraulic rigs as part of an internal joint project. The result are rigs that build on previous practical experience with HDD rigs and, at the same time, are trend-setting in terms of electrical drive, structure and quality!

The rigs impress with :

- safety
- environment friendly technology
- sustainability
- cost-efficiency

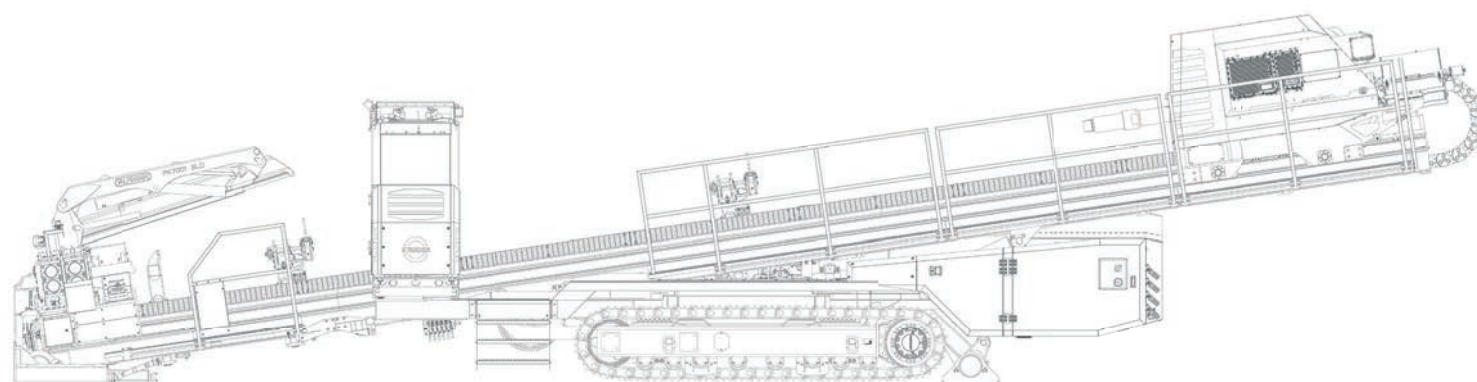


## OVERVIEW OF HDD-E SERIES

Renewable energies are becoming more and more important. This saves CO<sub>2</sub> emissions and protects the environment. Following technology trends the entire drive system of the HDD-E rigs was designed to be fully electric. Compared to conventional rigs, these rigs also impress with their significantly higher efficiency rate.

In addition, the new HDD-E rigs combine numerous advantages in many areas:

- The fully electric drive system is able to **temporarily store excess energy**, which can be accessed flexibly when required. This optimises energy consumption.
- **Emission protection** was a key driver when planning the rigs. By means of the electrical drive technology, the rigs are very quiet, which, in addition to a high level of acceptance in residential and natural conservation areas, also has advantages for occupational safety and for the employees.
- The new technology not only significantly reduces noise but also **CO<sub>2</sub>-emissions**. The reduction in CO<sub>2</sub> is becoming more and more important at invitations to tender.



- The HDD-E rigs offer the option of being **supplied via the public power grid**. In addition, the drilling rigs can be moved without external energy sources.
- They also impress with their **cost efficiency**. In addition to saving energy consumption, operating costs can be reduced significantly. Due to the fully electrical design of the HDD-E rigs, maintenance costs are also reduced to a minimum.
- The operation of the HDD-E rigs is made considerably easier by an **intuitive operating concept**. The large touch panel gives the operator a good overview of the drilling process and the most important drilling parameters.
- In terms of **safety**, the rigs are convincing by their integrated anti-collision system, among other items. The rigs can be relocated and installed using the remote control. For the operator, this means an optimal field of vision and therefore a reduction in risks of accidents. This offers considerable advantages even in confined spaces.
- Moreover, the HDD-E rigs include a **boost function**. During operation higher thrust and pullback forces can be temporarily retrieved. This guarantees a higher flexibility as well as a wider range of applications.

Our HDD-E rigs combine proven technology with a high degree of sustainability, efficiency and an intuitive, modern operating concept.

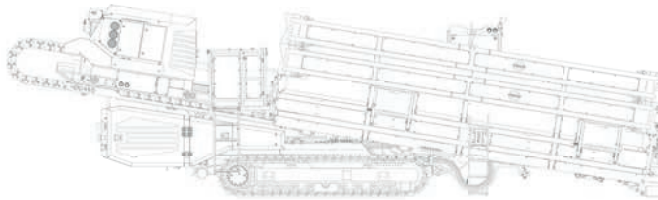






# HDD45-E

## TECHNICAL PRODUCT DATA SHEET



### STREICHER HDD45-E

- Thrust load: 450 kN (45 t)  
Pullback load: 450 kN (45 t); 600 kN (60 t) (boost)
- Power rating: 250 kVA (235 kW)
- Transport weight: 28.5 t
- Dimensions (LxWxH): 11.2 x 2.55 x 3.0 m
- Ambient temperature: -20 to +40°C

### Mast

- Length: 11 m
- Travel distance: 7.8 m
- Max. drill pipe length: 6.1 m (20 ft)
- Mast drilling angle: 9° - 19°
- Anchor plate: heavy-duty-design with mud drain

### Thrust and Pullback

- Type: Rack & Pinion
- Thrust load: 450 kN (45 t); 600 kN (60 t) (boost)  
Pullback load: 450 kN (45 t)
- Min. carriage speed: 0.02 m/min
- Max. carriage speed: 60 m/min

### Rotation Drive

- Max. drilling torque: 24,000 Nm
- Max. break-out torque: 30,000 Nm
- Max. rotation speed: 150 rpm
- Power rating: 190 kW
- Drive: electric motor
- Mud swivel: 2 x 1 1/2" / 100 bar
- Saver sub: NC38 (3 1/2" IF)
- Drive shaft adjustment: shiftable (80 mm)

### Break-out unit

- Break-out torque: 45,000 Nm
- Make-up torque: 36,000 Nm
- Opening width: 220 mm
- Movable break-out unit, travel distance: 500 mm
- Drill pipe support on both sides

### Crawler

- Type: crawler chassis
- Drive: electric motor driven by battery
- Ground travel speed: 2.8 km/h
- Control: remote control for crawler and rig-up operation
- Rubber pads for crawler tracks

### Pipe Handling

- Type: automatic pipe box system with stackable and exchangeable pipe boxes
- Integrated pipe box  
Capacity: 9 x 3.5" – drill pipes with 6.1 m length
- One stackable and exchangeable pipe box  
Capacity: 9 x 3.5" – drill pipes with 6.1 m length

### Mud Pump

- Type: onboard Triplex-piston pump
- Drive: electric motor

- Power rating: 146 kW
- Max. pressure: 62 bar
- Flow rate: 1,000 l/min (continuously); 1,500 l/min (max)
- Pulsation damper: yes
- External feed-in: (3" - Fig. 1502)

### Electronic Performance Data

- Power supply: 400 V / 400 A / 3 ph, PE / 50 Hz
- Type: shock resistant mobile electronics, IP67
- Battery: integrated in DC intermediate circuit; operation of all functions possible; temperature management system integrated; energy recovery system implemented
- Cooling: internal water circuit

### Control System / Operation Panel

- Control cabin: onboard, foldable for transportation
- Controls: joystick-operation and b-drive
- Display: 19"-touch-panel with individually configurable parameters
- Drill assistance system
- Ergonomic comfort driver's seat with vibration damping
- Cabin with air conditioning and heater
- Lighting of the rig via a large number of LED headlights
- Safety: anti-collision system

### Standards

- Machinery Directive 2006/42/EC
- HDD-Standard DIN EN 16228-3
- Low Voltage Directive 2014/35/EU
- EMC-Directive 2014/30/EU

### Options\*

#### Pipe Handling

- Stackable pipe box  
Capacity: 9 x 3.5" – drill pipes with 6.1 m length
- Drill pipe greasing unit
- Drill pipe cleaning system integrated in pipehandling system

#### Control System / Operation Panel

- Camera system: up to four cameras with permanent display in cabin
- Data recording: drilling data can be recorded and stored for later viewing
- Two-way radio
- Customisable remote access and remote maintenance
- Radio

#### Further Equipment

- Measuring cable reel: automatic reel with camera and lighting for 100 m measuring cable
- Integrated high pressure cleaner
- Access platform with ladder on mast for measuring cable connection works for steering tools
- Double flanged mud swivel, suitable for cable reel installation: 100 bar / 2 1/4"
- Cable for power supply

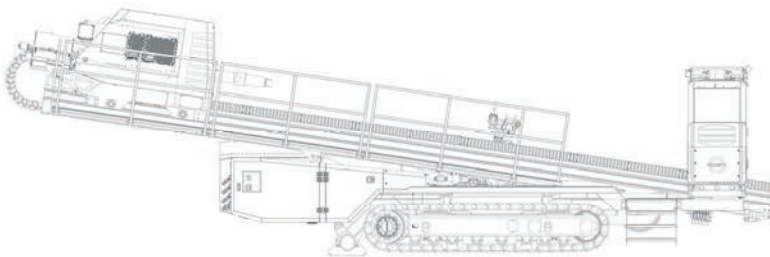
\* further options available on demand





# HDD80-E

## TECHNICAL PRODUCT DATA SHEET



### STREICHER HDD80-E

- Thrust / pullback load: 800 kN (80 t); 1,000 kN (100 t) (boost)
- Power rating: 400 kVA
- Transport weight: 40 t
- Dimensions (LxWxH): 15.6 x 3.0 x 3.2 m
- Ambient temperature: -20 to +40°C

### Mast

- Length: 15.3 m
- Max. travel distance: 11.4 m
- Max. drill pipe length: 9.5 m (Range II)
- Mast drilling angle: 8° - 20°
- Anchor plate: heavy-duty-design with mud drain
- Walkways: width 1.0 m, along the mast

### Thrust and Pullback

- Type: Rack & Pinion
- Thrust / pullback load: 800 kN (80 t); 1,000 kN (100 t) (boost)
- Min. carriage speed: 0.02 m/min
- Max. carriage speed: 30 m/min

### Rotation Drive

- Max. drilling torque: 57,000 Nm
- Max. break-out torque: 70,000 Nm
- Max. rotation speed: 100 rpm
- Power rating: 190 kW
- Drive: electric motor
- Mud swivel: 100 bar / 3" / extra robust design
- Saver sub: NC50 (4 1/2" IF)
- Drive shaft adjustment: shiftable (80 mm)

### Break-out Unit

- Break-out torque: 90,000 Nm
- Make-up torque: 70,000 Nm
- Opening width: 10" (245 mm)
- Movable along the mast
- Height adjustable drill pipe support

### Crawler

- Type: crawler chassis
- Drive: electric motor driven by battery
- Control: remote control for crawler and rig-up operation

### Electronic Performance Data

- Power supply: 400 V / 630 A / 3 ph, PE / 50 Hz
- Type: shock resistant mobile electronics, IP67
- Battery: integrated in DC intermediate circuit; operation of all functions possible; temperature management system integrated; energy recovery system implemented
- Cooling: internal water circuit

### Control System / Operation Panel

- Control cabin: onboard, foldable for transportation
- Controls: joystick-operation and b-drive

- Display: 19"-touch-panel with individually configurable parameters
- Drill assistance system
- Ergonomic comfort driver's seat with vibration damping
- Cabin with air conditioning and heater
- Lighting of the rig via a large number of LED headlights
- Safety: anti-collision system

### Standards

- Machinery Directive 2006/42/EC
- HDD-Standard DIN EN 16228-3
- Low Voltage Directive 2014/35/EU
- EMC-Directive 2014/30/EU

### Options\*

#### Pipe Handling

- Type: automatic pipe loading unit
- Capacity: 5 x 5"-drilling rods
- Rod supports: integrated in the mast with high precision and teachable position

#### Pipe Handling Crane

- Loading crane, remote controlled
- With integrated pipe gripper

#### Mud Pump (Onboard)

- Triplex-piston pump
- Drive: electric motor
- Power rating: 146 kW
- Max. pressure: 62 bar
- Flow rate: 1,000 l/min (continuous)  
1,500 l/min (max)
- Pulsation damper: yes
- External feed-in: possible (3" - Fig. 1502)

#### Mud Pump (External)

- Various manufacturers possible
- Drive: electric motor
- Software integration in operator's control of drilling rig

#### Control System / Operation Panel

- Camera system: up to four cameras with permanent display in cabin
- Data recording: drilling data can be recorded and stored for later viewing
- Two-way radio
- Customisable remote access and remote maintenance

#### Further Equipment

- Measuring cable reel: automatic reel with camera for 100 m measuring cable
- Integrated high pressure cleaner
- Rubber pads for crawler tracks

\*further options available on demand





## PRODUCTS WITH ECOTEC LABEL – REDUCING EMISSIONS, PUSHING ENVIRONMENT PROTECTION...

**Why ecotec?** The industrial landscape is changing rapidly because the requirements for safety and efficiency are constantly increasing. In recent years, the issues of the environmental protection and nature conservation – and thus also the question of regenerative energy sources – have become particularly important. STREICHER also holds the objective to reduce CO<sub>2</sub>-emissions in the future in order to counteract climate change. Therefore, STREICHER has made it a primary objective to reduce the ecological footprint by **launching own products that are driven electrically among others**. The many years of practical experience and the multilayered competences within the company group are providing support in integrating the new technologies into related modifications and new developments.

**These efforts are summarised under a separate, appropriate label called ecotec.** In line with the goal of decarbonisation, the ecotec label combines innovative technologies with future-focused trends and essentially combines the issues of **resource conservation, environment protection, energy efficiency and optimisation of the entire energy cycle**.

Besides the **fully electric driven HDD-E rigs** STREICHER has already brought the following products with ecotec label to marketability – a **fully electric driven mud pump**, that can be used in combination with the HDD-E rigs, **electrically driven welding tractors**, that are especially on duty within pipeline construction as well as **vacuum crawlers**, that are used for the efficient removal of soil materials. In line with our goal we also offer **retrofit services**.







**PROGRESSIVE AND  
ECO-FRIENDLY**

**OUR HDD-E SERIES REPRESENTS INNOVATIVE,  
ENVIRONMENTAL FRIENDLY AND POWERFUL DRILLING PROCEDURES.**

