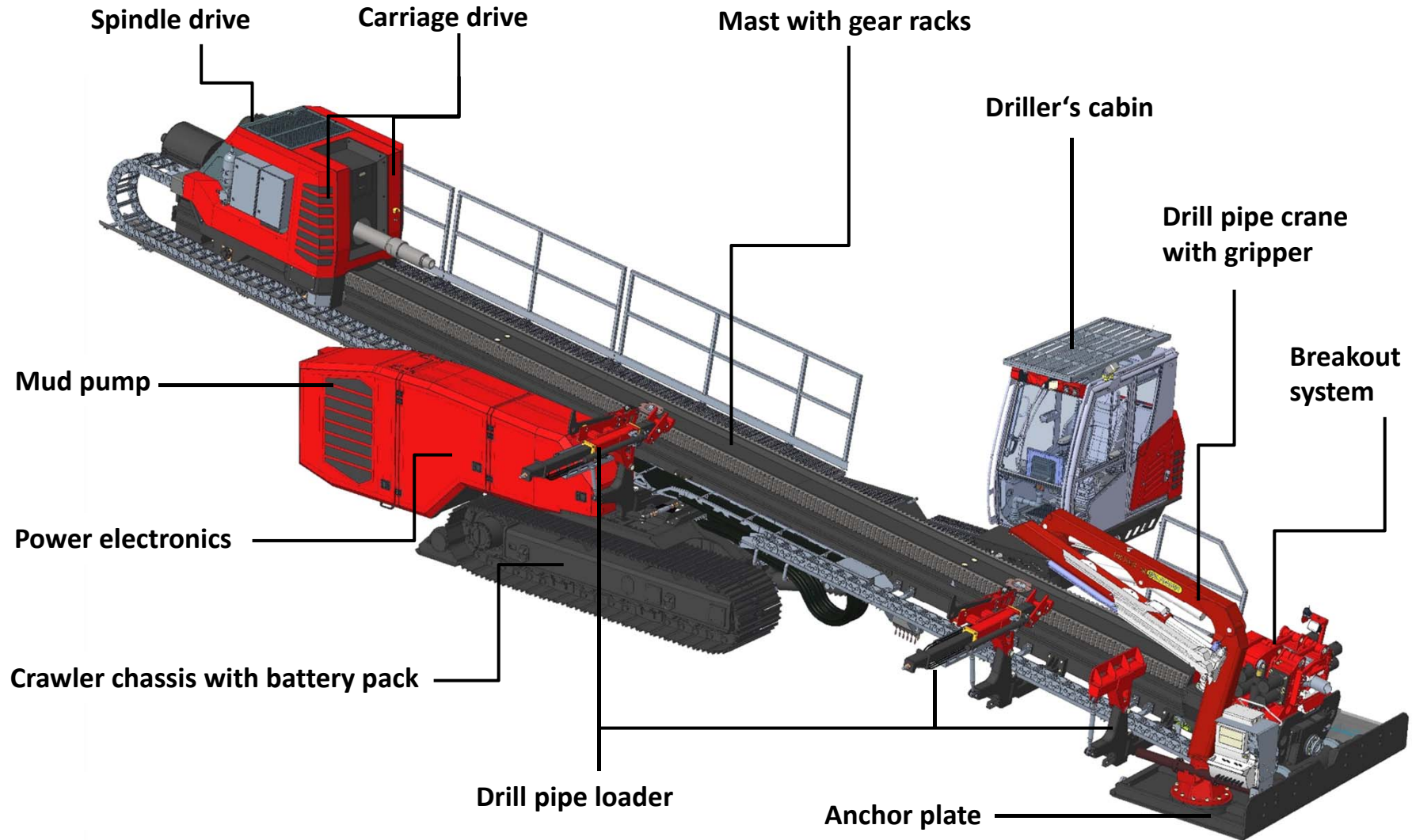


HDD80-E - Fully Electrical Horizontal Drilling Rig

IPLOCA New Technologies Award 2021



STREICHER HDD80-E





Innovative technology

- + Fully electrically operated system in the main functions!
- + More safety and user-friendly operability!
- + Energy storage and recuperation!
- + Compensation of load peaks by retrieving stored energy!
- + Future-proof – through preparation for further digitization and with regard to the choice of energy sources!



Fully electrical drive – Advantages in health / environment protection and profitability

- + Minimized noise development!
- + Reduction of oil / fuel requirements!
- + Reduction of operating costs, service and maintenance!
- + Power supply via the public power grid or alternative energy sources!
- + Reduction of CO₂-emissions!



HDD80-E – Fully Electrical Horizontal Drilling Rig

1. Does it provide the pipeline construction industry with something it did not have before?

Compared to conventional systems, the all-electric HDD80-E impresses with its significantly higher efficiency. Among other things, the braking energy of the system is not destroyed, but fed back into the integrated energy storage or the supply network. This significantly optimizes energy consumption. A fully electric HDD rig in combination with energy recovery and a comprehensive range of services with regard to safety, environmental friendliness and efficiency is unique. Due to the integrated battery, no additional equipment is required when installing, setting and moving the system. **Drilling possible in nature reserves!**

2. Does it constitute an identifiable step forward in the technology/construction process?

In general, the HDD80-E created a basis that is equipped for future technologies (digitization, new drive technology and energy supply).

3. Does it improve safety and/or environmental protection?

The integrated anti-collision system represents an important improvement in terms of system safety. Furthermore, the HDD rig can be relocated and set up using a remote control. For the operator, this means an optimal field of vision and safe maneuvering and erection of the system, even in confined spaces. The noise pollution for the drilling team, the residents and the local wildlife is minimized. The oil requirement is significantly reduced because the engines are cooled with water instead of thermal oil. There is no need for fuel (diesel) including refueling. The fully electric drive significantly reduces CO₂ emissions compared to hydraulic and hybrid systems.





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4. Does it overcome a current problem area in pipeline construction?

Energy generation is changing, with renewable energies becoming more and more important. When it comes to approval procedures, clients and authorities are increasingly demanding environmental requirements. In order to take advantage of this future-oriented trend, the entire drive system of the HDD80-E was designed to be fully electric, which made a significant contribution.

With conventional hydraulically operated systems, it is not entirely possible to lay the pipeline in sensitive areas. Constantly increasing environmental requirements for HDD drilling pose a particular challenge when

- executing HDD-drilling work
- in high-protection areas
- in water protection areas

Very high noise emissions from a conventionally operated HDD rig with a hydraulic, diesel-powered drive make working in the vicinity of residential areas more difficult as they lead to severe stress on the local wildlife and damage to the health of employees and residents.

5. Does it provide a reason to change the manner in which pipelines are installed?

The HDD80-E provides a basis for checking, questioning and optimizing the procedure for future processes

6. Does it have additional benefits?

The HDD80-E can be supplied with "green electricity" from the public power grid. In addition to saving energy consumption, operating costs in particular can be reduced significantly. Due to the fully electric design of the HDD80-E, maintenance costs are also reduced to a minimum. The operation of the HDD80-E is made considerably easier by a combination of numerous automatic functions and an intuitive operating concept. The large touch panel gives the operator a good overview of the most important drilling parameters.

