

CARRIAGE	
Maximum pullback	300 Metric Ton - 660.000 lbs
Maximum thrust	100 Metric Ton – 220.000 lbs
Carriage drive system	Rack & Pinion – Planetary gear drive
Carriage rack dimension	M18 x 180
Maximum carriage speed	40 m/minute - 130 ft/minute
Minimum carriage speed	<0.15 m/min – 0.50 ft./min
Carriage gears	6 pcs Planetary RR 5500L3
Carriage motors	6 pcs PM Drum type - 87kW, water cooled
Carriage drives	6 pcs PowerMASTER, water cooled
Carriage brakes	Automatic hold function on drives. 2Ea -Spring applied, hydraulic released brakes
ROTARY	
Maximum Torque	140 kNm @ 20rpm – 100.000 ft-lbs
Maximum spindle rpm	85
Carriage drive system	Pinion and Planetary gear drive
Carriage gears	3 pcs Planetary RR 4000L1
Carriage motors	3 pcs PM Drum type-115kW, water cooled
Carriage drives	6 pcs PowerMASTER, water cooled
Rotary break	Automatic hold and torque release function
Mud / fluid course	4”
Maximum mud / fluid pressure	80 bar / 1150 psi
Dump-valve	2” Pinch Valve hydraulic operated
Drive spindle	6 5/8” FH – 220mm
Spindle slip	150mm – 6”
BREAK-OUT	
Maximum breakout torque	220 kNm – 162.000 ft-lbs
Maximum makeup torque	125 kNm – 92.000 ft-lbs
Break-out travel	Full length of mast
Vices range	100 – 380mm - 4”-15”
Vices clamping force	840kN – 1.848.000 lbs
Over all clearance	14”
Break-out translation	2 pcs planetary gears / hydraulic
Vision break-out	Dual camera system. Monitor in steer-cabin
GENERAL	
Drill Angle	7deg – 15deg
Drill pipe	Range II
Rig Length – transport position	16,5 meter – 54’ 2”
Rig Width – transport position	2,5 meter – 8’ 3”
Rig Height – transport position	4 meter – 13’ 2”
Rig total weight	42t – 92.400 lbs
King Pin	2”
Axels	2 pcs ROR – Fixed - air suspension / 1 Ea ROR – Steered – air suspension
Tyre dimensions	6 pcs 435-50-R22,5
Noise level	<60dba – translation speed < 25mtr/min
Auxiliary hydraulic power-pack	10-60kW on demand
Eco footprint	Bio degradable oils

Specifications subject to change without notice

NRI 300-140TE

NORMAG HDD RIG

MEET THE NEW STANDARD IN HDD RIGS



NORMAG®

NORMAG HDD RIG NRI 300-140TE

Our vision is to design and produce high-end equipment for the trenchless technology industry. Providing the customer high production rates and a best transport solution at a low cost of ownership.

We design each individual installation as part of the integral production process that typifies drilling, resulting in less operating actions thus minimizing the need for human labour. Choosing only premium wear-resistant components to reduce the need for maintenance and resulting lower costs. All this, combined with a keen transport solution, provides you with an economical tool giving the edge over the competition, and this at any job and required capacity.



Normag NRI 300-140TE

Electric Motion - rapidly evolving due to compact powerful water cooled drives - turned out to be an option for HDD rigs.

Selecting the electric drive delivers multiple advantages in addition to the major bespoke environmental advantages.

The electric drive generates 'true' precise data for push-pull, torque, away-distance, etc. All data can be used in any way you can imagine. Fewer large hydraulic oil tanks are required than with the traditional diesel-hydraulic drive. Less environmental issues due to the opening up of the hydraulic system - to connect and disconnect - to its separate power-pack(s).

In Normag's vision, the major reason to go for this system is that first and foremost the system's overall work grade is higher than with traditional hydraulic drives. Secondly, the rig is power on demand ready: only the required power is generated. For the majority of the drilling sequence there is little call for the high power rates generated by the diesel engine(s). Modern diesels are equally polluting even when running on lower power-rates. The rpm of the diesel engine(s) is often reduced to save on fuel by decreasing the rig translation and/or spindle rpm. All of the above is not the case with e-drive.

Power on demand has already proven that 25% can easily be saved on fuel, thus reducing your carbon footprint. The rig is also quiet to operate. If the translation

speeds remain below 25mtr/min the noise level can be better than 60dba.

The rig is controlled by Siemens plc in combination with Can-Bus. This means we have virtually unlimited possibilities to customise programming and/or HMI lay-outs. The standard HMI and programme features logging functions, as well as semi-automatic pre-programmed sequences. The standard programme also has sequences which permits both pull and push reaming. The push reaming method allows for reaming boreholes from land towards the sea or other difficult to reach areas. Normag is fully committed to rig-worker health and safety, rig-up time and user friendliness of the rig.

At Normag, development, engineering, production and assembly can all be found under one roof. This ensures that communication lines and delivery times are kept short and innovative developments and technologies quickly anticipated.



Meet the new standard in HDD rigs. If you need to install pipelines, fast, cost effective and with the utmost priority for environmental protection, the Normag NRI 300-140TE is your best option.

