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A GLOBAL INITIATIVE

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D100x140 NAVIGATOR HDD



D100x140 NAVIGATOR® HORIZONTAL DIRECTIONAL DRILL



There is no substitute for downhole power.

Armed with key rotational torque and speed increases over its predecessors, Vermeer introduces the D100x140 Navigator® horizontal directional drill (HDD). With a maximum rotary torque output of 14,000 ft-lb (18,981.5 Nm) and rotational speeds up to 203 rpm, it offers an exceptional one-two punch in response to your most challenging projects.

Powered by a 275 hp (205.1 kW) Tier 4 Interim (EU Stage IIIB) certified CAT diesel engine, the D100x140 HDD generates an impressive 100,000 lb (444.8 kN) of thrust and pullback. And it's all backed by an up to 230 gpm (870.6 L/min) / 1100 psi (75.8 bar) drilling fluid pump.

To get you there and back, select between 15' (4.6 m) or 20' (6.1 m) lengths of 3.5" (8.9 cm) Firestick® drill rod. Consider the 15' (4.6 m) option to minimize your footprint, or select the 20' (6.1 m) option for increased onboard rod carrying capacity.



1: An angled, open-top vise allows for the passage of larger tooling. Because of the large opening, operators can also use it to break out tooling.

2: Stackable rod boxes are easy to use with a single pin and patent-pending autolock.

3: Choose the optional onboard knuckle boom-style crane to reduce the amount of support equipment needed onsite.



4: Standard dual large, color LCD monitors offer visibility to machine information and DCI locator information.

5: Unique four-bar linkage rack and additional pads allow for operators to set up entry angles ranging from 12 - 24° (15' rod option) and 11 - 21° (20' rod option) increasing range attainable with tracks fully on ground.

6: Experience the difference that has made one-piece, forged Firestick drill rod the industry benchmark.

D 100 X 140 SPECIFICATIONS

DIMENSIONS AND WEIGHTS

Transport length (15' rod option): 29.8' (9.1 m)

Transport length (20' rod option): 37.8' (11.5 m)

Transport width: 100" (254 cm)

Min transport height: 11.3' (3.45 m)

Weight (15' rod option): 50,500 lb (22,906.4 kg)

Weight (20' rod option): 57,220 lb (25,954.6 kg)

Rack angle (15' rod option): 12 - 24° *

Rack angle (20' rod option): 11 - 21° *

OPERATIONAL

Thrust: 100,000 lb (444.8 kN)

Pullback: 100,000 lb (444.8 kN)

Max carriage speed: 175 ft/min (53.3 m/min)

Max spindle torque (at engine rpm of 114): 14,000 ft-lb (18,981.45 Nm)

Max spindle torque (at engine rpm of 152): 10,500 ft-lb (14,236.1 Nm)

Max spindle torque (at engine rpm of 203): 7000 ft-lb (9490.7 Nm)

Max ground drive speed: 2.8 mph (4.5 km/h)

Automated rod loader: Yes

Noise level: 84 decibels

ENGINE

Make: CAT

Fuel type: Diesel

Gross power rating: 275 hp (205.1 kW)

Engine speed: 2200 rpm

Cooling medium: Water

Aspiration: Turbo

Max operating angle (fore/aft): 25°

Max fuel consumption: .25 gpm (.95 L/min)

Air cleaner: Donaldson power core

Emissions compliance: Tier 4i (EU Stage IIIB)

*Depending on pad option

FLUID CAPACITY

Fuel tank capacity: 120 gal (454.3 L)

Engine crankcase (with filter): 4.4 gal (16.7 L)

Hydraulic tank capacity: 90 gal (340.7 L)

HYDRAULIC SYSTEM

Auxiliary pump flow at max engine rpm: 13.4 gpm (50.7 L/min)

Auxiliary pump relief pressure: 3000 psi (206.8 bar)

Thrust/Pullback pump flow at max engine rpm : 53 gpm (200.6 L/min)

Thrust/Pullback pump relief pressure: 6000 psi (413.7 bar)

Rotation pump flow at max engine rpm: 96 gpm (363.4 L/min)

Rotation pump relief pressure: 5400 psi (372.3 bar)

DRILLING FLUID SYSTEM

Max flow: 230 gpm (870.6 L/min)

Max pressure: 1100 psi (75.8 bar)

DRILL PIPE (15' ROD)

Type: Firestick

Length: 15' (4.6 m)

Joint diameter: 4.375" (11.1 cm)

Pipe diameter: 3.5" (8.9 cm)

Weight: 261 lb (118.4 kg)

Min bend radius: 197' (60 m)

Rod carrying capacity: 135' (41.15 m) with permanent rod box, 270' (82.3 m) with stacked box

Joint inside diameter: 2.3" (5.8 cm)

DRILL PIPE (20' ROD)

Type: Firestick

Length: 20' (6.1 m)

Joint diameter: 4.4" (11.2 cm)

Pipe diameter: 3.5" (8.9 cm)

Weight: 360 lb (163.3 kg)

Min bend radius: 197' (60 m)

Rod carrying capacity: 180' (54.9 m) with permanent rod box, 360' (109.7 m) with stacked box

Joint inside diameter: 2.3" (5.8 cm)

CRANE (OPTIONAL)

Weight: 2800 lb (1270.1 kg)

Max lifting capacity at 13' (4 m): 5070 lb (2299.7 kg)

Max lifting capacity at 19.5' (5.9 m): 4200 lb (1800.8 kg)

Rotation: 400°

Max reach: 19.5' (5.9 m)

Remote: Radio

FEATURES

Drilling lights: Standard

Stakedown system: Optional

Cab: Standard

Air conditioner: Standard

Remote ground drive control: Optional

Remote lockout: Standard

Electric strike alert: Standard

To help ensure smooth-running operations, your local Vermeer dealer offers everything from training and tooling, to electronics and software.



Vermeer Cutting Edge offers tooling built to the exacting specifications of Navigator HDDs, and backs it up with industry-leading product knowledge and availability.



It's in the mix. Select Vermeer drilling fluid systems feature a modular design for flexible mounting options.



Pick up bentonites, polymers and wetting agents from your Vermeer dealer.



The family of DCI DigiTrak® locators offers the industry standard in technology and ease of use.



The global team of Vermeer Navigator specialists provide localized training and expertise to the drilling conditions in your area.



Vermeer e-CALC estimates project emissions and can demonstrate environmental advantage to trenchless over competitive methods.