

Vermeer®

Horizontal Directional Drill

D100x120

Series II



NAVIGATOR®

Efficiency at its Best.

The Vermeer® D100x120 Series II Navigator® horizontal directional drill (HDD) was designed with the operator in mind. A climate-controlled cab with 360-degree visibility, a state-of-the-art operator's station and dual joystick controls all help to increase operator efficiency in the field.

The D100x120 Series II delivers 12,000 ft-lb (16,269.8 Nm) of rotational torque and 100,000 lb (444 kN) of thrust/pullback force to perform a wide range of bores in difficult ground conditions.

Equipped with a 225 hp (167.8 kW) John Deere diesel engine to handle larger product, the D100x120 Series II features a 150 gpm (567.8 L/min) or 200 gpm (757.1 L/min) onboard pump for increased back-reaming efficiency and power to downhole mud motors.

A self-cleaning rack-and-pinion carriage drive helps reduce maintenance time by eliminating chains. In addition, bolt-on gear rack sections make replacement easy when compared to welded gear-rack sections.



Climate-controlled cab.

A climate-controlled cab provides 360-degree visibility for easy monitoring of the drilling operations. Independent heating and air-conditioning controls allow the operator to control the cab climate and enhance comfort in all weather conditions, including snow, rain and summer heat. A full-size hinged door provides easy access to the operator's station, while tinted glass windows help reduce glare and heat from the sun.



The state-of-the-art operator's station is elevated with an electrically operated swivel-and tilt-control seat. Dual joysticks control functions for drilling fluid flow, breakout vise and throttle, and are integrated into the thrust and rotation controls. This feature provides the operator fingertip control over repetitive drill functions.



Horizontal Directional Drill



An optional telescopic crane allows the drill operator to change out rod boxes without the use of an excavator or backhoe. The remote-controlled crane gives the operator freedom to move around the drill for improved visibility when replacing rod boxes. The crane has a lift capacity of 7530 lb (3415.6 kg) and a maximum reach of over 20.6' (6.3 m).



Rack-and-pinion drive. This simple system provides smooth operation. The D100x120 Series II unique narrow rack-and-pinion design helps maintain a small footprint for accessibility in congested areas.



D100x120 Series II Specifications

General

- Length: 34.1' (10.4 m)
- Width (transport): 93" (236.2 cm)
- Height: 118" (299.7 cm)
- Height (crane option): 11' (3.4 m)
- Weight (without drill rod): 37,870 lb (17,177.5 kg)
- Weight (crane option, short rod box): 43,500 lb (19,731.3 kg)

Power

- Engine: John Deere 6068 Tier 3
- Gross power rating: 225 hp (167.8 kW)
- Rated rpm: 2400
- ERA certification: Tier 3

Fluid Capacities

- Engine oil (including filter): 8.3 gal (31.4 L)
- Fuel tank: 75 gal (283.9 L)
- Hydraulic tank: 85 gal (321.8 L)

Operational

- Max spindle torque:
 - Low: 12,000 ft-lb (16,269.8 Nm)
 - Medium: 9000 ft-lb (12,202.4 Nm)
 - High: 6000 ft-lb (8134.9 Nm)
- Max spindle speed: 120 rpm
- Thrust: 100,000 lb (444 kN)
- Pullback: 100,000 lb (444 kN)
- Min bore diameter: 5" (12.7 cm)
- Max ground-drive speed: 3.2 mph (5.1 km/h)
- Max carriage speed: 175 fpm (53.3 m/min)
- Drill rack angle: 22° – 33°
- Remote lockout: Yes
- Electrical strike alert: Yes

Drilling Fluid System

- Max flow: 150 gpm (567.8 L/min) or 200 gpm (757.1 L/min)
- Max pressure: 1100 psi (75.8 bar)

Features

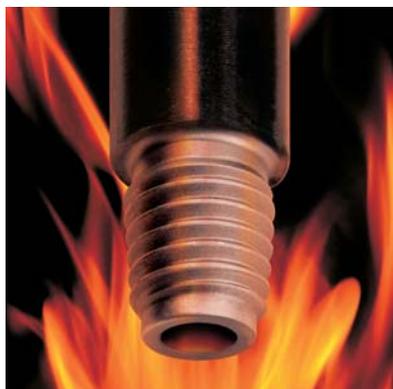
- Drilling lights
- Drilling fluid flow indicator

Crane

- Max lifting capacity: 7530 lb (3415.5 kg)
- Max lifting capacity (at full reach): 2350 lb (1065.9 kg)
- Rotation: 200°
- Max reach: 20.6' (6.3 m)

Drill Stem

- Type: Firestick
- Length: 20' (6.1 m)
- Joint diameter: 4.375" (11.1 cm)
- Pipe diameter: 3.5" (8.9 cm)
- Weight (rod): 351 lb (159.2 kg)
- Clip weight: 6090 lb (2762.4 kg)
- Min bend radius: 197.4' (60.2 m)
- Rod carrying capacity: 300' (91.4 m)



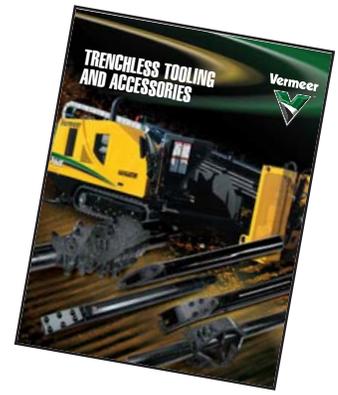
Measured to exact tolerances. Firestick® drill stem from Vermeer is designed to handle high-torque drilling situations while retaining a large inside diameter for superior drilling fluid flow. Constructed of Vermeer specified high-carbon alloy steel, Firestick drill stem features one-piece, forged rods that have been heat-treated for uniform strength and consistent quality.



Protect your investment. In addition to the Vermeer Equipment Limited Warranty, Vermeer offers you peace of mind by providing additional lifetime limited warranty protection on all rack gears and pinion gears.*

* Covered components: all rack gears and pinion gears. Excludes carriage, carriage rollers and guide rollers. See policy for details.

Vermeer offers everything from specialty tooling to training and technology.



The Vermeer Cutting Edge Group produces some of the world's most popular HDD, specialty and custom-made tooling. Call for a FREE HDD accessories catalog! **Call 1-866-VERMEER.**

To help ensure smooth-running operations, Vermeer offers everything you need – from one-day training seminars to computer software – for more efficient bore planning and performance.



Vermeer drilling fluid management systems provide the horizontal directional drill with quality mixing in a minimum amount of time. Smaller systems are self-contained on a mounting skid. Larger systems are available preassembled on mounting platforms to provide drilling operations with greater versatility.



Wetting agents, polymers and bentonites — you need the right mix to get through the tough bores. Vermeer offers specially formulated nontoxic polymer and bentonite drilling fluids to get the job done.



Locating systems are developed by working closely with the world's premier locating companies. Vermeer helps keep you on the leading edge of technology by offering a variety of options designed to meet the needs of varying applications.



Vermeer features a global team of Navigator HDD solutions specialists that provide localized training and operation expertise designed for the conditions in your area.



One-day horizontal directional drilling seminars, offered by industry experts at a Vermeer dealership near you, focus on current issues in the horizontal directional drilling industry.



The efficient, economical way to plan a bore. Vermeer software heightens professionalism by aiding the operator in preplanning the bore and comparing the planned bore path with the actual bore path.

The Vermeer dealer network: Reliable support, all over the world.



With nearly 200 locations across the globe - you're never far from an independent, authorized Vermeer dealer. Our dealers are in place to support your success with product expertise that's second to none.



When you need service, you can count on your local Vermeer dealer. With multiple locations, remote service trucks, and factory-offered technician training, your local Vermeer dealer offers reliable service that keeps your equipment running.



Vermeer parts are designed and manufactured to original specifications, so whether they're new parts or replacement parts, they'll live up to the Vermeer name.



Vermeer EMEA
(Europe, Middle East, Africa and CIS)
P.O. Box 323
4460 AS Goes
the Netherlands
Phone: +31 113 272700
Fax: +31 113 272727

Vermeer Corporation
1210 Vermeer Road East
P.O. Box 200
Pella, Iowa 50219 U.S.A.
Phone: (641) 628-3141
Fax: (641) 621-7773
International fax: +1 (641) 621-7730
www.vermeer.com

Vermeer Asia Pacific
48 Toh Guan Road East
#01-105 Enterprise Hub
Singapore 608586
Phone: +65 6516 9560
Fax: +65 6515 9218

Call toll-free 1-888-VERMEER
1-888-837-6337 (U.S.A. only)

Equipment shown is for illustrative purposes only and may display optional accessories or components. Please contact your local Vermeer dealer for more information about machine specifications. Vermeer Corporation reserves the right to make changes in engineering, design and specifications; add improvements; or discontinue manufacturing at any time without notice or obligation. Vermeer, Vermeer logo, Navigator, Atlas Bore Planner, FieldCalc, and Firestick are trademarks of Vermeer Manufacturing Company in the U.S. and/or other countries. John Deere is a registered trademark of John Deere & Co. 2009 Vermeer Corporation. All Rights Reserved.