

Vermeer®

Horizontal Directional
Drilling System

D80x100 *Series II*



NAVIGATOR®

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D80x100 Series II

The D80x100 Series II - Efficiency at its Best.

The Vermeer® D80x100 Series II NAVIGATOR® HDD is designed with the operator in mind. Drilling functions are integrated into the thrust and rotation joystick controls, providing the operator with fingertip control. The automated steering and auto thrust and pullback features help reduce operator fatigue and the constant manual operator adjustment needed from steering and load control during longer, larger bores.

The D80x100 Series II delivers 10,000 ft-lb (13,558 Nm) of rotational torque and 80,000 lb (36,287 kg) of thrust/pullback force to perform a wide range of bores in difficult ground conditions.

This commanding combination results in easier, more efficient handling of larger underground products. In addition, the D80x100 Series II offers a 150 or 200 gpm (568 or 757 L/min) onboard pump for increased backreaming and mudmotor efficiency.

The optional, patented RockFire® Ready System is beneficial in everyday drilling, providing such features as a built-in drilling fluid pump bypass, adjustable thrust control, and reverse rotation pressure limiter. A three-speed rotation gearbox allows the operator to match rotational speeds to varying ground conditions and backreamer sizes. Increased inside drill stem diameter reduces pressure drop across the drill stem joints improving mudflow efficiency.



Lifetime limited warranty on all rack gears and pinion gears.*



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.*



Rack-and-pinion drive. This system provides smooth operation. The rack is sectionalized and bolts on for easy repair or replacement.

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

HORIZONTAL DIRECTIONAL DRILLING SYSTEM



The floating vise feature allows the breakout system to clamp the full rod upsets during breakout of the lower and upper joints. The D80x100 Series II uses replaceable breakout dies.



The state-of-the-art operator's station is elevated with an electrically operated swivel and tilt control seat. Dual joysticks control functions for mudflow, breakout vise, and throttle and are integrated into the thrust and rotation controls. This feature provides the operator fingertip control over repetitive drill functions. Drilling pressure gauges are located within operator line of sight.

Power and Efficiency.



Measured to exacting tolerances. The D80x100 Series II carries up to 360' (110 m) of one-piece FIRESTICK® II drill stem in 15' (4.6 m) lengths designed to handle high torque while retaining a large inside diameter for superior drilling fluid flow.



D80x100 Series II Specifications

General

- Length: 358" (909 cm)
- Width (fixed tracks): 93" (236 cm)
- Height: 118" (300 cm)
- Weight: 37,500 lb (17,010 kg)

Operational

- Max spindle torque:
 - @ 90 rpm: 10,000 ft-lb (13,558 Nm)
 - @ 120 rpm: 6700 ft-lb (9084 Nm)
 - @ 180 rpm: 5000 ft-lb (6779 Nm)
- Max spindle speed: 180 rpm
- Thrust (actual): 80,000 lb (36,287 kg)
- Pullback (actual): 80,000 lb (36,287 kg)
- Min bore diameter: 5" (13 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

Drilling Fluid System

- Max flow: 150 or 200 gpm (568 or 757 L/min)
- Max pressure: 1100 psi (76 bar)

Features

- Breakout system: Power vise
- Drilling lights
- Flow indicator

Drill Stem

Type: FIRESTICK I

- Length: 15' (4.6 m)
- Joint diameter: 3.625" (9.2 cm)
- Pipe diameter: 3.5" (9 cm)
- Weight: 250 lb (114 kg)
- Clip weight (12 rod): 3600 lb (1633 kg)
- (24 rod): 6600 lb (2994 kg) / less rod box
- Min bend radius: 197.4' (60 m)
- Rod carrying capacity (12 rod): 180' (55 m)
- (24 rod): 360' (110 m)

Type: FIRESTICK II

- Length: 15' (4.6 m)
- Joint diameter: 3.86" (9.8 cm)
- Pipe diameter: 2.96" (7.3 cm)
- Weight: 200 lb (91 kg)
- Clip weight (12 rod): 2400 lb (1089 kg)
- (24 rod): 4800 lb (2268 kg) / less rod box
- Min bend radius: 168.7' (51.4 m)
- Rod carrying capacity (12 rod): 180' (55 m)
- (24 rod): 360' (110 m)

Power

- Engine: John Deere 6068
- Gross power rating: 200 hp (149 kW)
- Net power rating: 180 hp (139 kW)
- Rated rpm: 2400

Fluid Capacities

- Engine oil (including filter): 33 qt (31 L)
- Fuel tank: 75 gal (284 L)
- Hydraulic reservoir: 85 gal (322 L)

Vermeer offers everything from specialty tooling to training and technology.

At any given time, more than half of all horizontal directional drilling units in the world are Vermeer NAVIGATOR machines. 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.



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



Vermeer drilling fluid management systems provide the horizontal directional drill with quality mud 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 ATLAS BORE PLANNER® software heightens professionalism by aiding the operator in preplanning the bore and comparing the planned bore path with the actual bore path. The Vermeer FieldCalc™ system combines software and a hand-held computer to provide job site calculations, including setback distance, pullback time, and point-to-point calculations.

Your Complete Global Service Provider for Quality Parts and Service.



Get the parts and service edge. In addition to providing quality equipment, Vermeer delivers top-quality parts and superior services. Vermeer parts are manufactured to exacting specifications to help keep your Vermeer equipment running trouble-free and at OEM specifications.



Vermeer offers factory-certified training programs to its dealer network to ensure that the most current service procedures are presented to the service personnel of your Vermeer dealer.



Genuine Vermeer parts are precision crafted to match your Vermeer equipment EXACTLY. This ensures that your system will run as smoothly as possible, with the least amount of service and maintenance.

Vermeer®

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