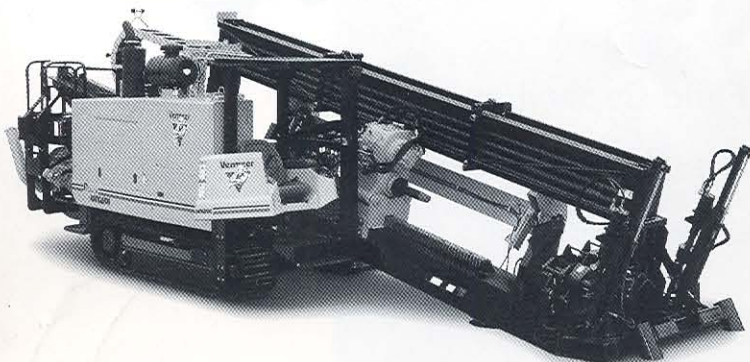


D100x120

NAVIGATOR[®]



Horizontal Directional Drilling System



The D100x120 - Efficiency at its Best

Vermeer Manufacturing Company has added yet another NAVIGATOR[®] horizontal directional drilling machine to its trenchless collection with the D100x120. The D100x120 HDD features many of the same benefits as its predecessors, such as rack and pinion design, which was first introduced to the Vermeer product line with the D33x44.

Features of the D100x120 include 12,000 ft-lb (16,270 Nm) of rotational torque and 100,000 lb (45,359 kg) of pullback. This commanding combination results in easier, more efficient handling of larger products. In addition, the D100x120 HDD is designed to produce high mudflow. This is accomplished by the inclusion of a 200 gpm (757 L/min) on-board pump for increased backreaming efficiency and powering down hole mud motors.

Operator efficiency is key on any machine. The D100x120 takes this to a new level with a state of the art operator's station. Designed with the comfort of the operator in mind, the station enhances the comfort of the operator during longer bores. An adjustable swivel, toggle switches with breakout system, fluid pump, radio, and throttle switches, all within easy reach are another benefit of the station. Strategically placed between the operator and the bore path, drilling pressure gauges, a flow meter, and a drilling fluid pump monitoring system contribute additional convenience.

The D100x120 also features the patented Remote Lockout System, a two-way communication and control tool that allows workers to lockout drill stem rotation, thrust and fluid flow along the bore path or at the exit site. This system was designed to prevent injury that can occur as a result of unexpected drill string operation.

The patented FIRESTICK[®] II drill stem gives the D100x120 further power and flexibility during drilling operations. FIRESTICK II drill stem joints are designed to withstand high torque and to allow high drilling fluid flow. Designed to withstand the rigors of horizontal directional drilling, a minimum bend radius of 197.4 ft renders shorter setback distance requirements and excellent steering capabilities.

The patented Rockfire[®], Ready System is also a standard feature that allows operation of the Rockfire pneumatic rock drilling system. The Rockfire Ready System is also beneficial in everyday drilling providing such features as a built-in pump bypass, adjustable thrust control, and reverse rotation pressure limiter.

Drill Unit

Length: 34.2' (10.4 m)
Width (fixed tracks): 93" (236 cm)
Height: 118" (300 cm)
Weight: 39,000 lb (17,690 kg)
Drilling Lights: Yes
Breakout System: Yes
Flow Indicator: Yes
Stakedown System: Yes-stationary
Remote Lockout: Standard
Automated Rod Greaser: Optional

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Operational

Spindle Torque (stall):

12,000 ft-lb (16,270 Nm) @ 60 RPM

9,000 ft-lb (122,202 Nm) @ 90 RPM

4,000 ft-lb (5,423 Nm) @ 120 RPM

Actual Pullback: 100,000 lb (45,360 kg)

Actual Thrust: 55,000 lb (24,950 kg)

Maximum Spindle Speed: 120 RPM

Maximum Carriage Speed: 70 ft/min (21.3 m/min)

Minimum Bore Diameter: 5" (13 cm)

Maximum Ground Drive Speed: 2.6 mph (4.2 km/h)

Drill Rack Angle: 22-33%

Remote Lockout: Yes-Standard

Drill Pipe

Type: Firestick II

Length: 20' (6.1 m)

Joint Diameter: 4.175" (11 cm)

Pipe Diameter: 3.5" (9 cm)

Weight: 330 lb (150 kg)

Clip Weight (9 rod): 3,400 lb (1542 kg)

(15 rod): 5,500 lb (2495 kg)

Minimum Bend Radius: 197.4' (60 m)

Rod Carrying Capacity: 300' (90 m)

Drilling Fluid System

Maximum Flow: 200 gpm (757 Lpm)

Maximum Pressure: 1,100 psi (76 bar)

Power Source

Engine: John Deere 6068

Gross Power Rating: 225 HP (168 kw)

Net Power Rating: 203 HP (151 kw)

Rated RPM: 2400 rpm

Fluid Capacities

Hydraulic Reservoir: 60 gal (227 L)

Fuel Tank: 60 gal (227 L)

Engine Oil (Including Filter): 33 qt (31 L)

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