



POWERFUL TORQUE. Operators can adjust the drill from 30,000 ft-lb to 54,000 ft-lb (40,675 Nm to 73,214.2 Nm) of rotary torque, with max torque being highly advantageous when turning large-diameter reamers and hole openers for installing large-diameter product.



MUD FLOW. The enhanced water course system features four 1.5-in (3.8-cm) mudlines and a 3-in (7.6-cm) head shaft, allowing high volumes of fluid to be pumped downhole.



DRILL ROD ADVANTAGES. Outfitting the drill with a 30-ft (9.1-m) rack gives crews the ability to use a variety of range 2 drill pipe at various diameters and a range of 29 ft to 32 ft (8.3 m to 9.8 m) in length, helping decrease the number of tool joint connections – the optimal setup for performing pipeline work.



CHOOSE YOUR CAB. Choose an excavator-style cab (cab on) for fast, compact setup and view of open-top vises, the rack and the rod loader. A stand-alone operator's station helps provide optimal operator comfort and room for the steering hand. Both the cab and operator's station include the same dual multifunction joystick controls found on all Vermeer S3 horizontal directional drills.



CATWALK AND ROD STAGER OPTIONS. Available on both the 20-ft and 30-ft (6.1-m or 9.1-m) rack options, the full-length catwalk provides access to the entire length of the rack for ease of wire lining and assisting in the rod loading process. The rod stager option helps improve overall efficiency by staging rods in advance and cycling rods with a touch of a button.



CARRIAGE SPEED. The high carriage speed aids in fast rod cycle time when adding or removing drill rods and helps cut down on cycle time when tripping out of the borehole.



D220x500 S3 NAVIGATOR® HORIZONTAL DIRECTIONAL DRILL

GENERAL DIMENSIONS AND WEIGHTS

Min transport length: 50.8 ft (15.5 m) Min transport width: 100 in (254 cm) Min transport height: 11.3 ft (3.4 m) Weight: 86,500 lb (39,235.7 kg)

ENGINE OPTION ONE

Make/Model: Caterpillar C13 ACERT Tier 4 Final Fuel type: Ultra-low sulfur diesel Maximum engine RPM: 2100 RPM Idle speed: 800 RPM Rated RPM: 2000 RPM Gross horsepower: 415 hp (310 kW) Cooling method: Liquid Aspiration: Turbocharged Max fuel consumption: 21.3 gph Emissions rating: Tier 4 Final (EU Stage IV) Maximum operating angle: 30°

OPERATIONAL

Thrust/pullback: 220,000 lb (978.6 kN) Maximum carriage speed in high at maximum engine RPM: 147 fpm (44.8 m/min) Maximum carriage speed in low at maximum engine RPM: 42 fpm (12.8 m/min) Maximum spindle torque low: 54,000 ft-lb (73,214.2 Nm) Maximum spindle speed high at max engine RPM: 97 rpm Maximum ground drive speed at maximum engine RPM (forward and reverse): 1.9 mph (3.1 kmh)

Noise level at operator's ear (on-board cab): 81.2 dB(A)

Minimum bore diameter: 6.1 in (15.4 cm)

Drill rack angle: 8.5° - 17° degrees (14.9% - 28.7%)

FLUID CAPACITIES

Fuel tank: 128 gal (483.9 L)

DRILLING FLUID SYSTEM OPTION ONE

Maximum flow: 350 gpm (1323 lpm) Maximum pressure: 1200 psi (82.7 bar) Make: Weatherford

CRANE

Maximum lifting capacity: 4740 lb (2150 kg) Maximum lifting capacity at max reach: 2530 lb (1147.6 kg) Rotation: 360° Maximum reach: 26.3 ft (8 m) Umbilical remote: Yes Wireless remote: Yes

FEATURES

Breakout system: Semi-open top vise Drilling lights: Yes Flow indicator: Yes Stakedown system: Yes Cab: Yes Strike alert: Yes Remote lockout: Yes

NOTES:



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