



**COMPACT FOOTPRINT.** Its compact footprint is suited for hard-to-access, narrow jobsites, while its self-contained design lessens the need for cumbersome support equipment.



VISE. The sliding vise moves 35.4" (89.9 cm) to help operators position the vise for maximum efficiency when reaming or pulling product.



COMMON CONTROLS. The D220x300 shares common controls with other drills in the Navigator lineup, decreasing operator training time and allowing for faster startups.



KNUCKLEBOOM CRANE. Optional knuckleboom crane mounted on either side of the base anchor easily maneuvers heavy tooling, reducing need for support equipment.



**POWER-TO-SIZE RATIO.** The power-to-size ratio allows for twice the pullback and rotation of similarly sized drills for versatile applications.



ROD LOADER. A single row, sliding arm rod loader allows for the staging of five rods at one time, increasing boring efficiency by minimizing rod loading time.

Prototype shown











## D220x300 NAVIGATOR® HORIZONTAL DIRECTIONAL DRILL

## **GENERAL DIMENSIONS AND WEIGHTS**

Min transport length: 37' (11.3 m) Min transport width: 100" (254 cm) Min transport height: 11.3' (3.4 m) Weight: 64,000 lb (29,029.9 kg)

**ENGINE** 

Make and model: CAT C13 ACERT Tier 4i

Fuel type: Diesel
Max engine rpm: 2150

Gross horsepower: 415 hp (309 kW)

Max torque: 1091 ft-lb (1479.2 Nm)

Cooling method: Liquid

Aspiration: Turbocharged and after-cooled EPA certification family: Tier 4i (EU Stage IIIB)

**OPERATIONAL** 

Thrust/Pullback: 242,100 lb (109,814.7 kg)

Max carriage speed at max engine rpm: 120 ft/min (36.6 m/min)

Max spindle torque (low at max engine rpm): 30,200 ft-lb (40,945.7 Nm)

Max spindle speed at max engine rpm: 164 rpm

Max ground drive speed at max engine rpm: 2.4 mph (3.9 km/h)

Noise level at operator's ear: 85 dB(a)

Drill rack angle:  $10 - 17^{\circ}$ 

**FLUID CAPACITIES** 

Fuel tank: 134 gal (507.3 L)

Engine crankcase with filter: 36 qt (34.1 L)

Hydraulic tank: 166 gal (628.4 L)

Engine cooling system: 84 gal (79.5 L)

HYDRAULIC SYSTEM

Auxiliary pump flow at max engine rpm: 32 gpm (121.1 L/min)

Auxiliary pump relief pressure: 3000 psi (206.8 bar)

**DRILLING FLUID SYSTEM** 

Max flow: 330 gpm (1249.2 L/min) Max pressure: 1200 psi (82.7 bar)

**Brand: Weatherford** 

**OPTIONAL CRANE** 

Weight: 2600 lb (1179.9 kg)

Max reach: 26.3' (8 m)

Max lift at max reach: 2530 lb (1147.6 kg)

Max capacity: 66,410 ft-lb (90,040 Nm)

Rotation: 406°

Wireless remote: Yes

**FEATURES** 

Breakout system: Open-top, dual clamp, 10.5"

(26.7 cm) diameter opening

Drilling lights: Yes
Flow indicator: Yes

Stakedown system: No

Cab: Yes

Strike alert: Yes

Remote lockout: Yes

**DRILL PIPE** 

Thread type: NC50 DS [4.5" (11.4 cm) IF double shoulder]

Length: 20.3' (6.2 m)

Rod diameter: 5" (12.7 cm) at 19.5 lb/ft

Wall thickness: .362" (9.2 mm)

Joint inside diameter: 3.25" (8.3 cm)

Weight per joint: 530 lb (240.4 kg)

Joint outside diameter: 6.625" (16.8 cm)