JT40

HORIZONTAL DIRECTIONAL DRILL



Ditch Witch®

JT40

Built from direct customer feedback, the JT40 is a true operator's drill, with the power and productivity owners demand, and the comfort features and intuitive controls to help operators work efficiently.



1 The patented open-sided vise wrenches are rotated toward the operator, enhancing visibility.

2 Features a reversible pipe box for added jobsite versatility.

3 Equipped with a 70-gpm, 1,000-psi (or optional 120-gpm, 1,000-psi) mud pump, the JT40 has increased fluid course from the mud pump to the swivel, for more downhole flow capabilities.

4 Unique add-a-pipe design to increase productivity.

5 Holds up to 600 ft (182.88 m) of drill pipe on board, reducing cycle times and increasing ROI.

JT40

1 Delivers 40,000 lbs (178 kN) of thrust and pullback—30 percent more thrust than competitive models in its class.

2 Equipped with a 165-gross-hp (123 kW), Tier 4, Stage V Cummins® diesel engine, the JT40 provides 18 more horsepower over competitive models in its class.

3 Features choice of a climate-controlled cab with tinted glass or an open operator's station to meet each customer's individual needs.

4 A heavy-duty anchor system securely holds operator position for more precise control in all soil conditions.

5 State-of-the-art-hydraulic components enhance drill performance and maximize drilling efficiency.

6 Swing-out, lift-off doors offer easy access for machine maintenance and serviceability.

7 The patented slide cartridge provides a backup for the carriage rollers if they reach the end of their useful life during a bore, allowing operators to complete a job without stopping to replace failed rollers, for increased uptime.

JT40 DRILL CAB

1 Best-in-class visibility of ground entrance, wrenches, shuttle-retract location and rear connection.

2 The JT40's Radial Operator Control (ROC) is a multifunctional device that delivers improved operator efficiency.

3 Industry-leading, telescoping cab places the operator at a precise angle, providing an enhanced view of drilling operations.

4 The ergonomic station features a heated seat with adjustable suspension and increased legroom to keep drillers comfortable during long hours on a job.

5 Fully enclosed cab offers premium operator comfort and complete climate control.

6 A real-time position indicator provides insight to the carriage location on every drill pipe installation.

7 Two seven-inch LCD screens for better visibility into all machine functions and diagnostics.

JT40 HORIZONTAL DIRECTIONAL DRILL

OPERATION	U.S.	METRIC
Spindle speed, max	225 rpm	
Spindle torque, max	5,500 ft·lb	7460 N·m
Carriage thrust travel speed	180 fpm	55 m/min
Carriage pullback travel speed	180 fpm	55 m/min
Thrust force	40,000 lb	178 kN
Pullback force	40,000 lb	178 kN
Backreamer diameter	Soil dependent	
Ground travel speed		
Forward/reverse	3 mph	4.8 km/h

POWER		
Engine	Cummins® QSB4.5	
Fuel	Diesel	
Manufacturer's gross power rating	165 hp	123 kW
Emissions compliance	EPA Tier 4	EU Stage V
Cooling medium	Liquid	
Injection	Direct	
Aspiration	Turbocharged & charge air cooled	
Number of cylinders	4	
Displacement	275 in³	4.5 L
Bore	4.21 in	107 mm
Stroke	4.88 in	124 mm
Rated speed	2,200 rpm	

DIMENSIONS		
Length	290 in	7.37 m
Width, w/open station	89 in	2.26 m
Width, w/cab, extended max	108 in	2.74 m
Height, w/cab, mobiling	97 in	2.46 m
Operating mass, no pipe, no cab	20,500 lb	9300 kg
Entry angle	20-29°	
Angle of approach	17°	
Angle of departure	17°	

DRILLING FLUID SYSTEM (70 GPM OPTION)		
Pressure, max	1,000 psi	69 bar
Flow, max	70 gpm	265 l/min

DRILLING FLUID SYSTEM (120 GPM OPTION)		
Pressure, max	1,000 psi	69 bar
Flow, max	120 gpm	454 l/min

WEIGHT CONFIGURATION		
Cab option	690 lb	310 kg
120 gpm fluid pump option	370 lb	168 kg

FLUID CAPACITIES		
Hydraulic reservoir	17 gal	64 L
Fuel tank	56 gal	212 L
Engine lubrication oil, w/filter	14 qt	13.2 L
Engine cooling system	25.6 qt	24.2 L
Antifreeze tank	8 gal	30 L
Diesel exhaust fluid tank	8.6 gal	32.6 L

POWER PIPE® HD	U.S.	METRIC
Length of dril pipe, nominal	180 in	4.57 m
Diameter of drill pipe, tool joint end	3.13 in	80 mm
Diameter of drill pipe	2.81 in	71 mm
Bend radius, min	146 ft	45 m
Weight of drill pipe, lined	150 lb	68 kg
Weight of drill pipe and large box (40 pipe)	7,140 lb	3240 kg
Weight of drill pipe and small box (20 pipe)	3,797 lb	1720 kg

POWER PIPE FORGED HD		
Length	180 in	4.57 m
Diameter of tool joint	3.13 in	80 mm
Diameter of drill pipe	2.75 in	70 mm
Bend radius, min	143 ft	43.6 m
Weight of drill pipe	145 lb	66 kg
Weight of drill pipe and large box (40 pipe)	6,940 lb	3148 kg
Weight of drill pipe and small box (20 pipe)	3,697 lb	1677 kg

POWER PIPE FORGED HDX		
Length	180 in	4.57 m
Diameter of tool joint	3.13 in	80 mm
Diameter of drill pipe	2.75 in	70 mm
Bend radius, min	143 ft	43.6 m
Weight of drill pipe	145 lb	66 kg
Weight of drill pipe and large box (40 pipe)	6,940 lb	3148 kg
Weight of drill pipe and small box (20 pipe)	3,697 lb	1677 kg

BATTERY (2 USED)	
SAE reserve capacity rating	195 min
SAE cold crank rating @ 0°F (-18°C)	950 amps

NOISE LEVEL	
Operator sound pressure per ISO 6396	< or = 85 dBA
Operator sound pressure per ISO 6396, w/cab	< or = 73 dBA
Exterior sound power per ISO 6395	< or = 103 dBA

Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

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