



# JT30 DIRECTIONAL DRILL



The Ditch Witch® JT30 is your total drill solution. It offers up to 35 more horsepower than the competition and is the quietest drill in its class—all as a direct result of listening to our customers. We took feedback from years of experience in all types of job conditions and incorporated it into an innovative, industry-leading design. You asked for it, and the JT30 delivers.

## KEY FEATURES

- 160-gross-hp (119-kW), Tier 4i engine is the most powerful in its class; full power to all machine functions boosts your overall productivity.
- Industry-exclusive, double-pivot drill frame allows steep entry angles without raising the tracks off the ground, for maximum stability while drilling.
- Exclusive assisted makeup and breakout feature: JT30 automatically adjusts speed when making up and breaking out drill pipe, saving wear on pipe threads and reducing operator fatigue.
- Quietest directional drill in its class (max. 85 dBA) for less environmental impact, less disruption in urban areas and greater operator comfort.
- Heavy-duty anchor system enables you to push or pull with full machine thrust and depend on the JT30 remaining in place; better machine stability while drilling means a quick and more productive bore.
- With a width that's 9 inches narrower than the competition (80 inches/2 m, without cab), the JT30 is a higher-horsepower drill that can operate in tighter spaces.
- Automatic, intuitive Carve Mode reduces operator fatigue and error, and is compatible with industry-leading TriHawk® HD housings and bits for exceptional efficiency and productivity.
- Advanced electronic system features improved diagnostics and customer-driven electronic functions.
- Optional cab features climate-controlled heat and air for greater operator comfort and productivity.
- Hinges on main and rear hoods allow easy access to all service points in the engine and mud pump; rear mud pump cover allows you to operate in colder conditions.
- Field-proven, heavy-duty rack and pinion thrust drive; welded-on double rack offers minimum maintenance and maximum reliability.
- Visibility enhanced by open-top vise wrenches and improved operator station; wrenches are angled toward the drill operator for an excellent view of the tool joint when making up and breaking out pipe, and all drill functions are clearly visible from operator station, with or without cab.



**SPECIFICATIONS**

<b>JT30</b>	<b>U.S.</b>	<b>METRIC</b>		<b>U.S.</b>	<b>METRIC</b>
<b>Operation</b>			<b>Drilling Fluid System</b>		
Maximum spindle speed*	225 rpm		Maximum drilling fluid pressure*	1,500 psi	103 bar
Spindle torque, max.	4,000 ft·lb	5420 N·m	Maximum drilling fluid flow*	50 gpm	189 L/min
Carriage thrust travel speed*	120 fpm	37 m/min	<b>Fluid Capabilities</b>		
Carriage pullback travel speed*	120 fpm	37 m/min	Hydraulic reservoir	27 gal	102 L
Thrust force*	24,800 lb	110 kN	Fuel tank	42 gal	159 L
Pullback force*	30,000 lb	133 kN	<b>Power Pipe</b>		
Bore diameter	4.5 in	114 mm	Length of drill pipe* nominal	118 in	3 m
Backream diameter	Soil dependent		Diameter of drill pipe tool joint end*	3 in	76 mm
Ground travel speed* (forward)	2.4 mph	3.9 km/h	Diameter of drill pipe*	2.38 in	60 mm
Ground travel speed* (reverse)	2.2 mph	3.5 km/h	Min. bend radius*	155 in	47 m
<b>Power – Tier 4i:</b>			Weight of drill pipe* (lined)	90 lb	41 kg
Engine	Cummins QSB4.5		Weight of drill pipe & large box (48 pipe)	5,500 lb	2500 kg
Fuel	Diesel		Weight of drill pipe & small box (24 pipe)	3,200 lb	1450 kg
Cooling medium	Liquid		<b>Batteries</b>		
Injection	Direct		SAE reserve capacity rating	195 min	
Aspiration	Turbocharged & Charge Air Cooled		SAE cold crank rating @ 0°F (-18°C)	950 amps	
Number of cylinders	4				
Displacement	275 in³	4.5 L			
Bore	4.21 in	107 mm			
Stroke	4.88 in	124 mm			
Manufacturer's gross power rating**	160 hp	119 kW			
Rated speed	2,300 rpm				
Peak gross power @ 2,000 rpm	163 hp	122 kW			
<b>Dimensions</b>					
Overall machine length (driving)*	220 in	5.59 m			
Overall machine length (transport)*	221 in	5.61 m			
Overall machine width*	80 in	2.03 m			
Overall machine width (w/cab)*	89 in	2.26 m			
Overall machine height (driving)*	119 in	3.02 m			
Overall machine height (transport)*	94 in	2.39 m			
Operating weight	17,075 lb	7750 kg			
Add JT Drill Pipe (full rack)	5,680 lb	2580 kg			
Add cab option (heat and air)	900 lb	410 kg			
Entry angle*	10-16°				
Angle of approach	19°				
Angle of approach (w/cab)	15°				
Angle of departure	18°				

\*Called out according to SAE J2022

\*\*Called out according to SAE J1995 to be included in specs in Operator's Manual