

# JT30 ALL TERRAIN HORIZONTAL DIRECTIONAL DRILL

 **Ditch Witch**<sup>®</sup>

**TRENCHLESS**



# JT30 ALL TERRAIN HORIZONTAL DIRECTIONAL DRILL

2

Hinged main and rear hoods allow easy access to all service points in the engine and mud pump.

3

Among the quietest drills in its class, for less environmental impact, less disruption in urban areas and greater operator comfort.

4

Open-top vise wrenches are angled toward the operator for an excellent view of the tool joint when making up and breaking out pipe.

1

Dual independent rear stabilizers are easy to set up and enhance stability on uneven or rough terrain.

6

160-gross-hp (119-kW), Tier 4 engine is the most powerful in its class; full power to all machine functions greatly enhances productivity.

5

Patented All Terrain technology has the industry's most advanced inner-rod design, proven to increase production in hard rock and difficult terrain.



You asked for a drill that tackles the toughest conditions, from solid rock to cobble and hard dirt. You wanted a compact design to operate in the tightest spots. You needed a patented, inner-rod design to save you time, and a mechanical drive to save you money on drilling fluid and transporting water. We delivered it all, and much more, with the Ditch Witch® JT30 All Terrain Horizontal Directional Drill.

WE'RE IN THIS TOGETHER.



# JT30 ALL TERRAIN HORIZONTAL DIRECTIONAL DRILL

1 Exclusive assisted makeup and breakout feature saves wear on pipe threads and reduces operator fatigue.



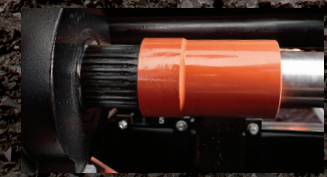
2 Add-a-pipe feature places individual pipes into loading system without lifting pipe into the top of the pipe box

3 Field-proven, heavy-duty rack and pinion thrust drive; welded-on double rack offers minimum maintenance and maximum reliability.



4 Optional wireless remote ground drive increases flexibility when moving the rig and allows fine-tuning of bore path placement.

6 SaverLok® System provides the tightest connection and best protection against wear and tear on the drill pipe and drive system; easy to install and replace, requiring no special tools.



5 Exclusive, dual-pivot drill frame allows steep entry angles without raising tracks off the ground—no need to readjust the machine.

7 Heavy-duty anchor system secures machine in difficult terrain so you can push/pull with full machine thrust.



**DON'T LET A LITTLE THING LIKE ROCK SLOW YOU DOWN.**

## JT30 ALL TERRAIN HORIZONTAL DIRECTIONAL DRILL SPECIFICATIONS



A comfortable operator is a more productive operator, which is why we've equipped the JT30 All Terrain Horizontal Directional Drill operator's station with a cutting-edge design. It features:

- Open-top vise wrenches are angled toward the operator for an excellent view of the tool joint when making up and breaking out pipe.
- Industry-exclusive, double-pivot drill frame allows steep entry angles without raising the tracks off the ground; enhances operator comfort because operator's station stays level.
- Optional cab features climate-controlled heat and air, for greater operator comfort and productivity.
- Operator's station features intuitive joystick that controls all drilling functions, ergonomic seat, color LCD engine display, and an excellent view of all drill functions.

	U.S.	METRIC		U.S.	METRIC
<b>OPERATION</b>					
Spindle speed, max	225 rpm				
Spindle speed, max (AT inner spindle)	400 rpm				
Spindle torque, max	4,000 ft-lb	5420 N-m			
Spindle torque, max (AT inner spindle)	800 ft-lb	1080 N-m			
Carriage thrust travel speed	120 fpm	37 m/min			
Carriage pullback travel speed	120 fpm	37 m/min			
Thrust force (AT mode)	24,800 lb	110 kN			
Pullback force	30,000 lb	133 kN			
Bore diameter (AT w/Rockmaster™ 822)	4.75 in	121 mm			
Bore diameter (AT w/Rockmaster 86)	5.5 in	140 mm			
Ground travel speed					
Forward	2.4 mph	3.9 km/h			
Reverse	2.4 mph	3.9 km/h			
<b>POWER (TIER 3) (LRC)</b>					
Engine	Cummins® QSB4.5				
Fuel	Diesel				
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			
Manufacturer's gross power rating	148 hp	110 kW			
Rated speed	2,300 rpm				
Peak gross power @ 2,000 rpm	156 hp	116 kW			
Emissions compliance	EPA Tier 3	EU Stage IIIA			
<b>POWER (TIER 4)</b>					
Engine	Cummins QSB4.5				
Fuel	Diesel				
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			
Manufacturer's gross power rating	160 hp	119 kW			
Rated speed	2,300 rpm				
Peak gross power @ 2,200 rpm	163 hp	122 kW			
Emissions compliance	EPA Tier 4	EU Stage IV			
<b>DIMENSIONS</b>					
Transport length	221 in	5.61 m			
Width	80 in	2.03 m			
Width, w/cab	89 in	2.26 m			
Transport height	94 in	2.39 m			
Weight, w/out pipe	17,660 lb	8010 kg			
Weight, w/cab	18,560 lb	8418 kg			
Entry angle	10-16°				
Angle of approach	19°				
Angle of approach, w/cab	15°				
Angle of departure	18°				
<b>DRILLING FLUID SYSTEM</b>					
Pressure, max	1,500 psi	103 bar			
Flow, max	50 gpm	189 l/min			
<b>FLUID CAPACITIES</b>					
Hydraulic reservoir	27 gal	102 L			
Fuel tank	48 gal	182 L			
Engine lubrication oil, including filter	13.7 qt	13 L			
Engine cooling system	24 qt	22.7 L			
Antifreeze tank	8 gal	30 L			
Diesel exhaust fluid tank	5 gal	18.9 L			
<b>POWER PIPE® HD</b>					
Length of drill pipe, nominal	118 in	3 m			
Joint diameter	2.75 in	70 mm			
Pipe diameter	2.38 in	60 mm			
Bend radius	123 ft	37.5 m			
Weight of drill pipe, lined	88 lb	40 kg			
Weight of drill pipe and large box, lined (48 pipe)	5,323 lb	2415 kg			
Weight of drill pipe and small box, lined (24 pipe)	2,959 lb	1342 kg			
<b>POWER PIPE FORGED (FOR DIRT DRILLING)</b>					
Length	120 in	3.05 m			
Joint diameter	2.63 in	66.7 mm			
Pipe diameter	2.38 in	60 mm			
Bend radius, min	108.2 ft	33 m			
Weight of drill pipe	73 lb	33 kg			
<b>ALL TERRAIN PIPE</b>					
Length of drill pipe, nominal	112 in	2.84 m			
Joint diameter	3.25 in	83 mm			
Pipe diameter	2.23 in	57 mm			
Bend radius, min	145 ft	44 m			
Weight of drill pipe, lined	100 lb	45 kg			
Weight of drill pipe and large box (35 pipe)	4,599 lb	2086 kg			
Weight of drill pipe and small box (20 pipe)	2,847 lb	1291 kg			
<b>ALL TERRAIN COBBLE PIPE</b>					
Length of drill pipe, nominal	112 in	2.84 m			
Joint diameter	3.25 in	83 mm			
Pipe diameter	2.94 in	75 mm			
Bend radius, min	210 ft	64 m			
Weight of drill pipe, w/inner rod	127 lb	58 kg			
Weight of drill pipe and large box (35 pipe)	5,544 lb	2515 kg			
Weight of drill pipe and small box (20 pipe)	3,387 lb	1536 kg			
<b>BATTERY</b>					
SAE reserve capacity rating	195 min				
SAE cold crank rating @ 0°F (-18°C)	950 amps				
<b>NOISE LEVEL</b>					
Operator sound	86 dBA				
Operator sound w/cab	83 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.



## THE DITCH WITCH® HDD SYSTEM INCLUDES:



### HDD TOOLING

For your directional drill, we offer a complete line of genuine Ditch Witch drill bits, HD backreamers, drill pipe, and beacon housings, the most reliable and durable in the horizontal directional drilling industry.



### MUD MIXERS

Ditch Witch fluid-management systems include the innovative FM13V, a fluid-mixing system that features a pump that lubricates itself during mixing and works so efficiently that it delivers 20 percent more fluid than other models.



### VACUUM EXCAVATORS

Ditch Witch vacuum excavators are designed for a tremendous range of soft-excitation and cleanup tasks, including all manner of non-hazardous spills in and around the directional drilling jobsite. They're the most powerful, efficient and quiet vac systems on the market.

