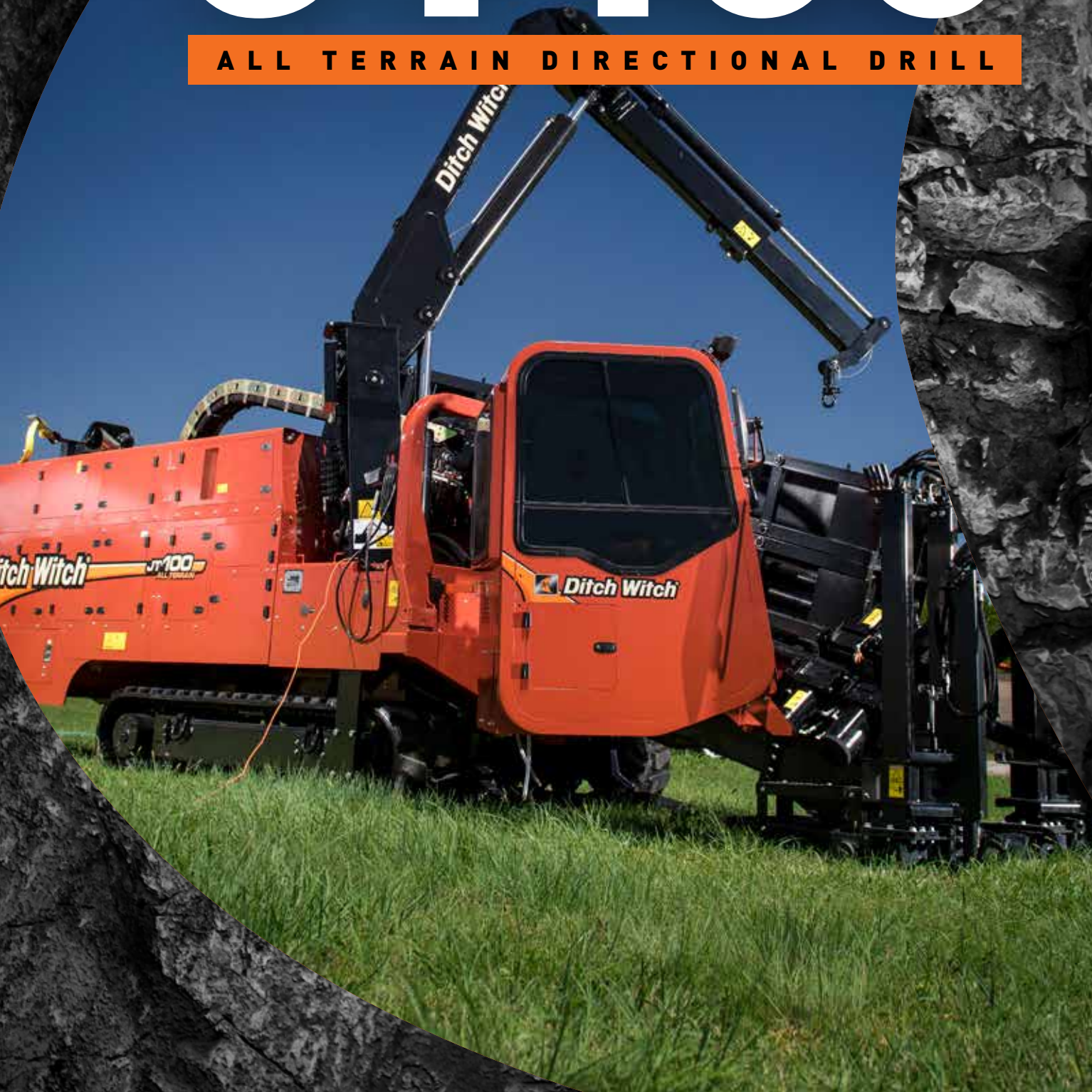




# JT100

ALL TERRAIN DIRECTIONAL DRILL



Ditch Witch

# JT100 ALL TERRAIN

When you're challenged with a lengthy installation through every type of soil including solid rock, you need the superior power and technology offered by the Ditch Witch® JT100 All Terrain Horizontal Directional Drill. With the JT100 All Terrain you get 100,000 lb (445 kN) of pullback and up to 2,000 ft•lb (2700 N•m) of torque, powered by a huge, 268-hp (200-kW) engine. Everything is engineered to maximize the productivity of the machine's patented All Terrain technology, a two-pipe drilling system that enables you to drill and steer simultaneously.

Infinitely variable rotary drive enables the JT100 All Terrain to match spindle speed and torque to power through virtually any soil condition.

Large-capacity, 230-gpm (870-l/min) fluid pump plus larger hoses and fittings help move fluid downhole faster for greater productivity.

Heavy-duty, double rack-and-pinion thrust drive is field-proven to push/pull through long, tough bores.

Fully enclosed cab offers instrument panel positioned for visibility, conveniently places controls and an excellent view of the tool joint.

Optional onboard loader and exclusive heavy-duty anchor system eliminate the need for large and expensive support equipment, reducing transportation costs, setup time and jobsite size.

268-hp (200-kW) engine efficiently delivers tremendous power to all drilling functions, so you can get the job done faster.

Exclusive dual-pivot drill frame allows steeper entry angles without raising tracks off the ground.

100,000 lb (445 kN) of pullback and 2,000 ft•lb (2700 Nm) of torque make the JT100 All Terrain ideal for installations of large-diameter pipe.

Industry-exclusive, patented All Terrain two-pipe drilling system provides more power to the bit than any other rock-drilling system in its class.



# JT100 ALL TERRAIN HORIZONTAL DIRECTIONAL DRILL

## OPERATION

	U.S.	METRIC
Spindle speed, max	210 rpm	
Spindle speed (AT inner Spindle), max	270 rpm	
Spindle torque, max	12,000 ft-lb	16300 N·m
Spindle torque (AT inner spindle), max	2,000 ft-lb	2700 N·m
Carriage thrust travel speed	150 fpm	46 m/min
Carriage pullback travel speed	150 fpm	46 m/min
Thrust force	70,000 lb	311 kN
Pullback force	100,000 lb	445 kN
Ground travel speed		
Forward/reverse	3.6 mph	5.8 km/h

## POWER

Engine	Cummins® QSB6.7	
Fuel	Diesel	
Cooling medium	Liquid	
Injection	Direct	
Aspiration	Turbocharged & charge air cooled	
Number of cylinders	6	
Displacement	409 in <sup>3</sup>	6.7 L
Bore	4.21 in	107 mm
Stroke	4.88 in	124 mm
Manufacturer's gross power rating	268 hp	200 kW
Rated speed	2,200 rpm	

## DIMENSIONS

	U.S.	METRIC
Length	368 in	9.35 m
Width	101 in	2.57 m
Height	110 in	2.79 m
Operating mass	49,250 lb	22339 kg
Entry angle	10-15°	
Angle of departure	17°	

## DRILLING FLUID SYSTEM

Pressure, max	1,000 psi	69 bar
Flow, max	230 gpm	870 l/min

## FLUID CAPACITIES

Hydraulic reservoir	47 gal	180 L
Fuel tank	97 gal	370 L

## ALL TERRAIN PIPE

Length of drill pipe	14.1 ft	4.31 m
Tool joint, outside diameter	4.5 in	114 mm
Bend radius, min	205 ft	62.5 m
Weight of drill pipe	284 lb	130 kg
Weight of drill pipe, full box (12 pipe)	4,430 lb	2010 kg

## BATTERY (2 USED)

SAE reserve capacity rating	450 min	
SAE cold crank rating @ 0°F (-18°C)	1,400 amps	

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:



### MUD MIXERS

Ditch Witch fluid-management systems include the innovative FM13X, 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.



### HDD TOOLING

For your directional drill, we offer a complete line of genuine Ditch Witch HDD tooling, including drill bits, backreamers, drill pipe and beacon housings.

