

# JT100 MACH 1 HORIZONTAL DIRECTIONAL DRILL

 **Ditch Witch**<sup>®</sup>



**TRENCHLESS**



# JT100 MACH 1 HORIZONTAL DIRECTIONAL DRILL

1

Large-capacity, 230-gpm (870-l/min) fluid pump and 2-inch fluid course help move fluid downhole faster, for greater productivity.

2

Efficient hydraulic cooling system uses less fluid than the competition, reduces maintenance costs and keeps the engine operating efficiently all day.

3

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

10

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

9

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

8

100,000 lb (445 kN) of pullback and 12,000 ft·lb (16,300 N·m) of torque make the JT100 ideal for installations of large-diameter pipe.





4

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.



5

Exclusive assisted makeup feature automatically adjusts carriage thrust speed when making up and breaking out drill pipe, minimizing wear on pipe threads and extending drill pipe life.

6

Specialized Ditch Witch-manufactured drill pipe is designed to provide greater strength and flexibility.



The Ditch Witch® JT100 Mach 1 Horizontal Directional Drill delivers power when and where you need it to complete the bore in the most efficient way possible. There's plenty of power for an optional onboard loader and anchor system, too, which eliminate your need for additional equipment for pipeloading, anchoring and other tasks, and give the JT100 a unique ability: the power to reduce the size of the jobsite.

**WE'RE IN THIS TOGETHER.**

7

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



# JT100 MACH 1 HORIZONTAL DIRECTIONAL DRILL SPECIFICATIONS

	U.S.	METRIC
<b>OPERATION</b>		
Spindle speed, max	210 rpm	
Spindle torque, max	12,000 ft-lb	16300 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
Bore diameter	6 in	152 mm
Backream diameter	Soil dependent	
Ground travel speed		
Forward/reverse	3.6 mph	5.8 km/h

<b>POWER</b>		
Engine	Deutz® TCD2013L6	
Fuel	Diesel	
Cooling medium	Liquid	
Injection	Direct	
Aspiration	Turbocharged & charge air cooled	
Number of cylinders	6	
Displacement	436 in³	7.15 L
Bore	4.25 in	108 mm
Stroke	5.1 in	130 mm
Manufacturer's gross power rating	268 hp	200 kW
Rated speed	2,300 rpm	
Emissions compliance	EPA Tier 3	EU Stage IIIA

<b>DIMENSIONS (*FULL RACK)</b>		
Length	368 in	9.35 m
Width	101 in	2.57 m
Height	110 in	2.79 m
Weight*	45,300 lb	20500 kg
Entry angle	10-15°	
Angle of approach	13°	
Angle of departure	17°	

<b>DRILLING FLUID SYSTEM (ON BOARD)</b>		
Drilling fluid pressure, max	1,000 psi	69 bar
Drilling fluid flow, max	230 gpm	870 l/min

<b>FLUID CAPACITIES</b>		
Hydraulic reservoir	47 gal	180 L
Fuel tank	97 gal	370 L

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.

	U.S.	METRIC
<b>POWER PIPE®</b>		
Length of drill pipe, nominal	177 in	4.5 m
Diameter of drill pipe, tool joint end	4 in	102 mm
Diameter of drill pipe	3.62 in	92 mm
Bend radius, min	205 ft	62 m
Weight of drill pipe	229 lb	104 kg
Weight of drill pipe & box (12 pipe)	3,760 lb	1710 kg
<b>BATTERY (2 USED)</b>		
SAE reserve capacity rating	450 min	
SAE cold crank rating @ 0°F (-18°C)	1,400 amps	

