



# JT20 HORIZONTAL DIRECTIONAL DRILL

TRENCHLESS



# JT20 HORIZONTAL DIRECTIONAL DRILL

1

Advanced cooling system uses five fewer gallons of fluid than competitive systems, for exceptional efficiency, less cost and less environmental impact; our system draws in ambient air, which results in a cooler-running package.

2

Turbocharged, 74-hp (55-kW) Deutz® diesel engine is Tier-4 compliant, requiring no expensive after-treatment; engine's diesel oxidation catalyst replaces the muffler and decreases emissions.

3

Compact JT20 has a high ratio of power to size, allowing you to install more utilities per day in tight, congested areas.

4

Industry-best cruise control system simplifies drilling and backreaming.

7

Exceptionally efficient Sauer H1 hydrostatic pumps control rotation and thrust; design enhancements include a larger displacement pump and simplified, two-speed hydraulic thrust circuit for increased reliability.

9

Proven tethered ground drive controller allows you to maneuver the drilling unit to a position that provides better visibility, easier loading/unloading and easier positioning.

8

Drilling fluid system pumps mud at 25 GPM; high fluid flows enable longer utility installations and better performance in sandy soils.





5

Auto-throttle feature saves fuel and reduces pollution by slowing the engine to idle after 15 seconds of inactivity; when you resume work, the auto-throttle engages.

With the Ditch Witch® JT20 Horizontal Directional Drill, less is more. Much more. Its efficient, turbocharged engine produces less noise for the operator—82 dBA, among the quietest in its class—and because it's Tier-4 and Tier-4i compliant, it requires no expensive after-treatment. The JT20 has no grease zerks—the competition has 19—and all daily maintenance points are in one easy-access location, so you spend less time servicing it and more (billable) time serving your customers. And that's reason number one we created the streamlined, ultra-efficient JT20.

WE'RE IN THIS TOGETHER.

6

Automated, intuitive carve mode reduces operator fatigue and is easy to set up and adjust; compatible with industry-leading TriHawk® HD housings and bits for superior efficiency and productivity in hard, compacted soils and soft rock.



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1

Large-capacity, automatic drill pipe lubrication system.



**Ditch Witch®**

6

Heavy-duty stakedown system allows you to push or pull with full machine thrust and remain secure in virtually any drilling condition.

2

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



3

Rack-and-pinion design offers 17,000 lb of thrust (75.6 kN) and 20,000 lb (89 kN) of pullback force for outstanding performance on a wide range of installations.

JT20

5

Coordinated makeup feature increases the life of drill pipe joints by automatically matching carriage speed with rotation during pipe makeup and breakout.

4

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

**WHEN YOU'RE MORE COMFORTABLE,  
YOU'RE MORE PRODUCTIVE.**



**The JT20 Horizontal Directional Drill is exceptionally productive for many reasons, including the roomy operator's station where you are in total control. It features:**

- Simple, intuitive controls for all machine drilling functions.
- Industry-best cruise control system simplifies drilling and backreaming by reducing operator effort.
- Color LCD display provides engine diagnostics and informational messages.
- Ergonomic seat provides operator comfort, which results in greater productivity.
- Comfortable operator's station provides excellent visibility of the drill pipe and pipeloading system; open-top vise wrenches are angled toward the operator for an excellent view of the tool joint.



## JT20 HORIZONTAL DIRECTIONAL DRILL SPECIFICATIONS

	U.S.	METRIC
<b>OPERATION</b>		
Spindle speed, max	210 rpm	
Spindle torque, max	2,200 ft·lb	2980 N·m
Carriage thrust travel speed	140 fpm	43 m/min
Carriage thrust pullback travel speed	140 fpm	43 m/min
Thrust force	17,000 lb	75.6 kN
Pullback force	20,000 lb	89 kN
Bore diameter	4 in	102 mm
Ground travel speed		
Forward/reverse	3.2 mph	5.2 km/h

<b>POWER (TIER 4)</b>		
Engine	Deutz® TD2.9L4	
Fuel	Diesel	
Cooling medium	Liquid	
Injection	Direct	
Aspiration	Turbocharged	
Number of cylinders	4	
Displacement	177 in <sup>3</sup>	2.9 L
Bore	3.62 in	92 mm
Stroke	4.33 in	110 mm
Manufacturer's gross power rating	74 hp	55 kW
Rated speed	2,600 rpm	
Emissions compliance	EPA Tier 4	EU Stage IIIB

<b>POWER (TIER 4i) (LRC)</b>		
Engine	Deutz TD2.9L4	
Fuel	Diesel	
Cooling medium	Liquid	
Injection	Direct	
Aspiration	Turbocharged	
Number of cylinders	4	
Displacement	177 in <sup>3</sup>	2.9 L
Bore	3.62 in	92 mm
Stroke	4.33 in	110 mm
Manufacturer's gross power rating	74 hp	55 kW
Rated speed	2,600 rpm	
Emissions compliance	EPA Tier 4i	EU Stage IIIA

	U.S.	METRIC
<b>DIMENSIONS</b>		
Length	207 in	5.26 m
Width	51.5 in	1.31 m
Height	90 in	2.29 m
Weight w/full rack	11,890 lb	5390 kg
Entry angle	10-14°	
Angle of approach	18°	
Angle of departure	18°	

<b>DRILLING FLUID SYSTEM (ONBOARD)</b>		
Pressure, max	1,500 psi	103 bar
Flow, max	25 gpm	94 l/min

<b>FLUID CAPACITIES</b>		
Hydraulic reservoir	19 gal	72 L
Fuel tank	30 gal	114 L
Engine oil w/filter	8.5 qt	8 L
Engine cooling system	4.6 gal	17 L

<b>POWER PIPE® HD</b>		
Length of drill pipe, nominal	120 in	3.05 m
Diameter of drill pipe, tool joint end	2.63 in	66.8 mm
Diameter of drill pipe	2.06 in	52.3 mm
Bend radius, min	107 ft	32 m
Weight of drill pipe, lined	67 lb	30.4 kg

<b>BATTERY</b>		
SAE reserve capacity rating	195 min	
SAE cold crank rating @ 0°F (-18°C)	950 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:



### HDD TOOLING

For your directional drill, we offer a complete line of genuine Ditch Witch drill bits, 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-excavation and cleanup tasks, including all manner of spills in and around the directional drilling jobsite. They're the most powerful, efficient and quiet vac systems on the market.

