



# AT120

ALL TERRAIN DIRECTIONAL DRILL



Ditch Witch®

# AT120

At 80 DbA, the AT120 reduces jobsite noise for a more comfortable and productive worksite.

1

The new large displacement fluid pump with an increased fluid flow brings the GPMs needed to boost uptime.

2

The new engine compartment and compartment panel design free up more room around critical components, making maintenance easier and more efficient.

3

The 20-foot drill pipe helps your machine limit makeup/breakout and maximize drilling time.

4



Integrated wireline platform gives the working hand greater access when connecting wire.

6

Independent stabilizers in the rear of the machine provide even more stability across uneven terrain.

I-Beam anchor plate design allows you to stake down in varying soils, increasing stability across demanding jobs and tough terrain.

5



Wireless Remote

Loaded with 120,000 lbs (533.8 kN) of pullback/thrust and 15,500 ft-lbs (21015 N·m) of rotational torque, the AT120 not only opens you up to new types of jobs but moves through long bores and large diameter installs with eye-popping power. All Terrain technology and a 280-hp (209 kW) Stage V Cummins® engine reduce environmental impact without losing any power. 3,000 ft-lbs (4067 N·m) of inner rotational torque—a 50% increase over its predecessor—allows the AT120 additional power to drill through the toughest terrain around.

# AT120

## OPERATOR'S STATION

Best-in-class, fully-enclosed cab features premium climate-controlled heat and air, heated suspension seats, added legroom and two LED touchscreen displays.



3 Virtually Assisted Makeup and Breakout (VAM) makes it easier for you to makeup and breakout tool joints without the need for floats and sensors.

4 Open top, angled front wrenches allow you greater visibility of machine functions during operation.

Real-time carriage-position indicator provides you with the exact carriage position for increased productivity and intuitive operation.

2 Standard multimode joysticks give you the ability to select your preferred style of operating controls with the push of a button.

# ROCKMASTER®

## ALL TERRAIN HOUSING

Engineered to deliver the most impact in the toughest conditions, RockMaster Housing is the go-to component for jobsite challenges. The RockMaster is the only housing designed to provide superior performance with All Terrain technology and, as with all Ditch Witch equipment, it's manufactured with the quality you expect, so you can take on every job with confidence. And a whole lot of power.

1 Choose between RockMaster bits with 3.5" API or 4.5" API threads.

2 When maintenance is needed, the bearing pack can be removed and replaced in the field keeping downtime to a minimum.

3 New single-pin lid retention system with 5 points of contact and optional screws offer proven protection of electronics.

4 The tailpiece features integrated teeth and optional nozzles to aid in breaking and moving cuttings during pullback, decreasing tailpiece wear from abrasive cuttings.

5

The laser-clad bearing hub and patented bearing pack minimize maintenance requirements and allow for longer run times.

# AT120 ALL TERRAIN DIRECTIONAL DRILL



OPERATION	U.S.	METRIC	DRILLING FLUID SYSTEM	U.S.	METRIC
Spindle speed, max	200 rpm		Pressure, max	1,100 psi	76 bar
Spindle speed (AT inner spindle), max	250 rpm		Flow, max	285 gpm	1079 L/min
Spindle torque, max	15,500 ft-lb	21015 N·m			
Spindle torque (AT inner spindle), max	3,000 ft-lb	4067 N·m			
Carriage thrust travel speed	210 fpm	64 m/min	FLUID CAPACITIES		
Carriage pullback travel speed	210 fpm	64 m/min	DEF tank	12.2 gal	46.3 L
Thrust force	120,000 lb	533.8 kN	Hydraulic reservoir	39 gal	148 L
Pullback force	120,000 lb	533.8 kN	Fuel tank	120 gal	454 L
Bore diameter	6.5 in	165 mm	Engine lubrication oil, w/filter	18.5 qt	17.5 L
Backreamer diameter	Soil dependent		Antifreeze tank	20 gal	76 L
Ground travel speed			POWER PIPE® HD (3.36DS)		
Forward/reverse	2.8 mph	5 km/h	Length of drill pipe	240 in	6.09 m
POWER			Diameter of drill pipe, tool joint end	4.38 in	111.2 mm
Engine	Cummins QSB6.7		Diameter of drill pipe	3.95 in	100 mm
Fuel	Diesel		Bend radius, min	205 ft	62.5 m
Cooling medium	Liquid		Weight of drill pipe, lined	296 lb	134.2 kg
Injection	Direct		ALL TERRAIN PIPE (3.36DS)		
Aspiration	Turbocharged & charge air cooled		Length of drill pipe	240 in	6.09 m
Number of cylinders	6		Diameter of drill pipe, tool joint end	4.38 in	111.2 mm
Displacement	409 in <sup>3</sup>	6.7 L	Diameter of drill pipe	3.95 in	100 mm
Bore	4.21 in	107 mm	Bend radius, min	205 ft	62.5 m
Stroke	4.88 in	124 mm	Weight of drill pipe	395 lb	179.1 kg
Manufacturer's gross power rating	280 hp	209 kW	BATTERY (2 USED)		
Rated speed	2,200 rpm		SAE reserve capacity rating	175 min	
Emissions compliance	EPA Tier 4F	EU Stage V	SAE cold crank rating @ 0°F (-18°C)	950 amps	
DIMENSIONS			NOISE LEVEL		
Length	453 in	11.5 m	Operator sound pressure per ISO 6394	< or = 80 dBA	
Width	100.4 in	2.55 m	VIBRATION LEVEL		
Height, w/ cab	121.5 in	3.09 m	Average vibration transmitted to the operator's hand and whole body during normal operation does not exceed 2.5 and 0.5 m/sec <sup>2</sup> respectively.		
Operating weight	49,761 lb	22571 kg			
Entry angle	12-18°				
Angle of approach	17°				
Angle of departure	17°				

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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.

