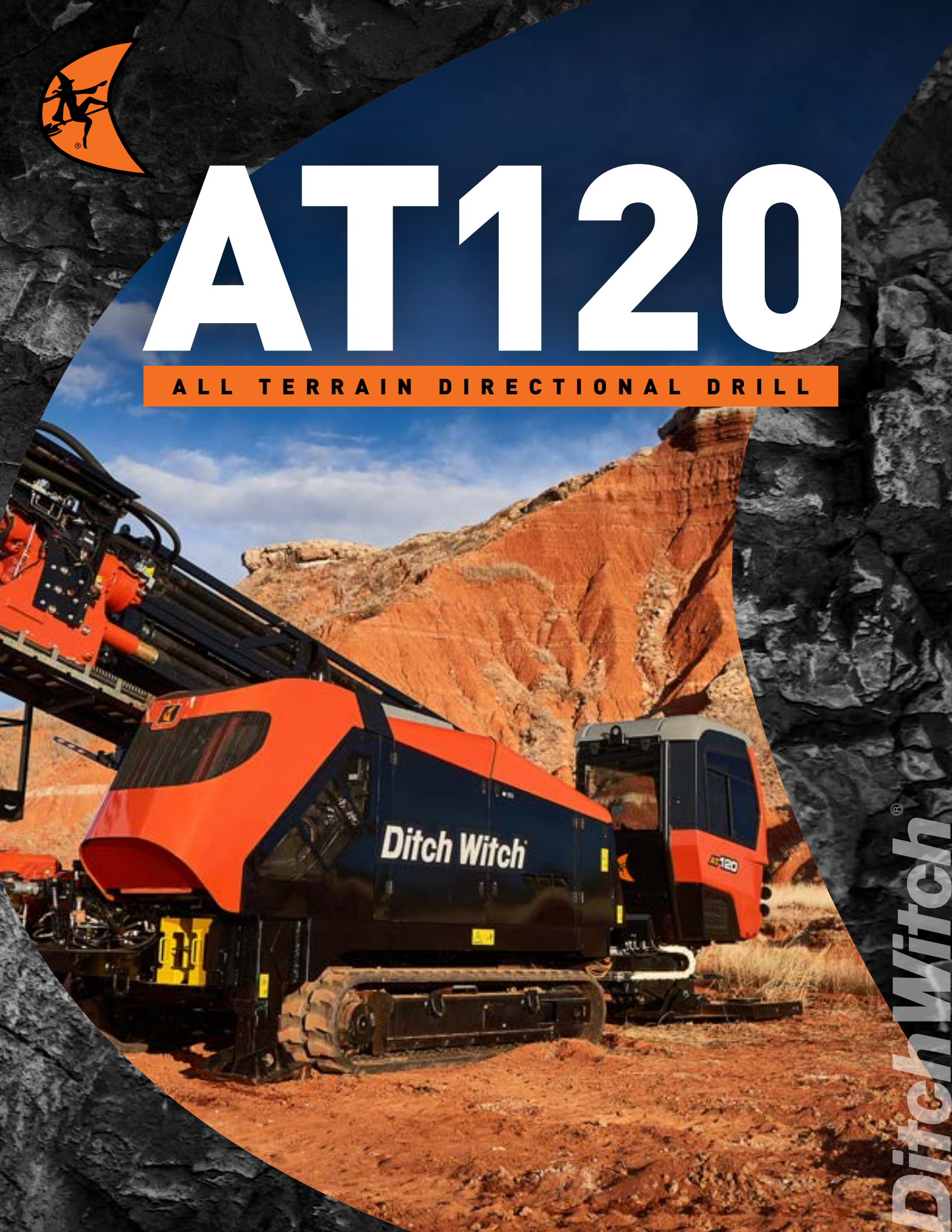
AT120

ALL TERRAIN DIRECTIONAL DRILL



DitchWitch®


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
7
Integrated wireline platform gives the working hand greater access when connecting wire.
Ditch Witch
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6
Independent stabilizers in the rear of the machine provide even more stability across uneven terrain.

AT120

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.

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

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



Wireless Remote

Wireless remote allows you to operate critical machine functions from outside the cab. Traverse your drill while controlling the ground drive, hydraulic-powered stabilizers and more.



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.

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.



1 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.

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



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.

AT120 ALL TERRAIN DIRECTIONAL DRILL

OPERATION	U.S.	METRIC
Spindle speed, max	200 rpm	
Spindle speed (AT inner spindle), max	250 rpm	
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
Carriage pullback travel speed	210 fpm	64 m/min
Thrust force	120,000 lb	533.8 kN
Pullback force	120,000 lb	533.8 kN
Bore diameter	6.5 in	165 mm
Backreamer diameter	Soil dependent	
Ground travel speed		
Forward/reverse	2.8 mph	5 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^3	6.7 L
Bore	4.21 in	107 mm
Stroke	4.88 in	124 mm
Manufacturer's gross power rating	280 hp	209 kW
Rated speed	2,200 rpm	
Emissions compliance	EPA Tier 4F	EU Stage V

DIMENSIONS		
Length	453 in	11.5 m
Width	100.4 in	2.55 m
Height	121.5 in	3.09 m
Weight w/o pipe boxes or anchors	40,260 lb	18262 kg
Weight w/ 1 pipe box and anchors	46,630 lb	21151 kg
Weight w/ 2 pipe boxes and anchors	50,940 lb	23106 kg
Weight of hydraulic anchors	2,060 lb	934 kg
Entry angle	12-18°	
Angle of approach	17°	
Angle of departure	17°	

DRILLING FLUID SYSTEM	U.S.	METRIC
Pressure, max	1,100 psi	76 bar
Flow, max	285 gpm	1079 l/min

FLUID CAPACITIES		
DEF tank	12.2 gal	46.3 L
Hydraulic reservoir	39 gal	148 L
Fuel tank	120 gal	454 L
Engine lubrication oil, w/filter	18.5 qt	17.5 L
Antifreeze tank	20 gal	76 L

POWER PIPE® HD (3.36DS)		
Length of drill pipe	240 in	6.09 m
Diameter of drill pipe, tool joint end	4.38 in	111.2 mm
Diameter of drill pipe	3.95 in	100 mm
Bend radius, min	205 ft	62.5 m
Weight of drill pipe, lined	296 lb	134.2 kg
Weight of drill pipe and large box (9 pipe)	3,445 lb	4896 kg

ALL TERRAIN PIPE (3.36DS)		
Length of drill pipe	240 in	6.09 m
Diameter of drill pipe, tool joint end	4.38 in	111.2 mm
Diameter of drill pipe	3.95 in	100 mm
Bend radius, min	205 ft	62.5 m
Weight of drill pipe	395 lb	179.1 kg
Weight of drill pipe and large box (9 pipe)	4,310 lb	1955 kg

BATTERY (2 USED)	
SAE reserve capacity rating	175 min
SAE cold crank rating @ 0°F (-18°C)	950 amps

NOISE LEVEL	
Operator sound pressure per ISO 6394	< or = 80 dBA

VIBRATION LEVEL

Average vibration transmitted to the operator's hand and whole body during normal operation does not exceed 2.5 and 0.5 m/sec^2 respectively.

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.



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