



DITCH WITCH®

JT4020 MACH 1/ALL TERRAIN

Equal parts brains and brawn, the JT4020 can't wait to tackle the big drilling jobs. Utilizing specialized 15-ft (4.5 m) Ditch Witch drill pipe, it has the power and stability to pull multiple conduits up to 1,000 feet (305 m) in a single pass—assisted by a heavy-duty rack-and-pinion thrust drive and an exclusive cruise control feature that maintains thrust and rotation settings. You expect more from Ditch Witch equipment, and the JT4020 delivers.



KEY FEATURES

Heavy-duty rack and pinion thrust drive with welded double rack offers minimum maintenance and maximum reliability.

Enough engine horsepower to drive all functions simultaneously.

Patented mechanical rock-drilling system on the All Terrain version provides more power to the bit than any other rock-drilling system in its class.

Hydraulic, four-point anchor system enables the unit to be firmly secured in all types of ground conditions.

DETAILS

Touch-sensitive, variable-speed, electric-over-hydraulic controls minimize operator effort; thrust/pullback and rotation are controlled by a single lever.

Industry-leading pipeloader system features hydraulic pipe grippers, single pipe loading, hydraulic shuttle stops, and automated thread lubrication.

High drilling fluid flow: an on-board pump enables productive drilling at extended distances; normal flow rate can be operated simultaneously with thrust/pullback and rotation.

Two-speed carriage allows faster travel during makeup and breakout; exceptional low-speed drilling control plus higher speeds for rapidly adding or removing drill pipe.

Instrument panel gauges are positioned for visibility, controls are conveniently placed, and a single lever controls drilling and backreaming adjustments.

Rubber tracks minimize damage to pavement, curbs, lawns, and landscaping.

SPECIFICATIONS

JT4020

DIMENSIONS

OVERALL MACHINE LENGTH
OVERALL MACHINE WIDTH
OVERALL MACHINE HEIGHT
OPERATING WEIGHT
OPERATING WEIGHT (ALL TERRAIN)
ENTRY ANGLE
ANGLE OF APPROACH
ANGLE OF DEPARTURE

U.S.	METRIC
337 IN	8.56 M
87 IN	2.21 M
96 IN	2.44 M
27,670 LB	12 550 KG
28,170 LB	12 777 KG
10-16°	10-16°
17°	17°
17°	17°

POWER PIPE

LENGTH OF DRILL PIPE, NOMINAL
DIAMETER OF DRILL PIPE TOOL JOINT END
DIAMETER OF DRILL PIPE
MINIMUM BEND RADIUS
WEIGHT OF DRILL PIPE
WEIGHT OF DRILL PIPE AND LARGE BOX (32 PIPE)
WEIGHT OF DRILL PIPE AND SMALL BOX (16 PIPE)

177 IN	4.50 M
3.50 IN	89 MM
2.81 IN	71 MM
190 FT	58 M
158 LB	72 KG
6000 LB	2720 KG
3100 LB	1410 KG

ALL TERRAIN PIPE

LENGTH OF DRILL PIPE, NOMINAL
DIAMETER OF DRILL PIPE TOOL JOINT END
DIAMETER OF DRILL PIPE
MINIMUM BEND RADIUS
WEIGHT OF DRILL PIPE (WITH INNER PIPE)
WEIGHT OF DRILL PIPE AND LARGE BOX (18 PIPE)
WEIGHT OF DRILL PIPE AND SMALL BOX (9 PIPE)

171 IN	4.34 M
4.13 IN	105 MM
3.63 IN	92 MM
300 FT	91 M
264 LB	120 KG
5580 LB	2530 KG
3150 LB	1430 KG

OPERATIONAL

MAXIMUM SPINDLE SPEED
MAXIMUM SPINDLE SPEED (AT INNER SPINDLE)
MAXIMUM SPINDLE TORQUE
MAXIMUM SPINDLE TORQUE (AT INNER SPINDLE)
CARRIAGE THRUST TRAVEL SPEED
CARRIAGE PULLBACK TRAVEL SPEED
THRUST FORCE
THRUST FORCE (ALL TERRAIN MODE)
PULLBACK FORCE
BORE DIAMETER
BORE DIAMETER (ALL TERRAIN)
BACKREAM DIAMETER
GROUND TRAVEL SPEED (FORWARD)
GROUND TRAVEL SPEED (REVERSE)

240 RPM	240 RPM
250 RPM	250 RPM
5000 FT•LB	6800 N•M
2000 FT•LB	2700 N•M
120 FPM	37 M/MIN
120 FPM	37 M/MIN
36,000 LB	160 KN
25,000 LB	111 KN
40,000 LB	178 KN
5.0 IN	127 MM
6.25 IN	159 MM
SOIL DEPENDENT	SOIL DEPENDENT
2.5 MPH	4.0 KM/H
2.5 MPH	4.0 KM/H

POWER

ENGINE
FUEL
COOLING MEDIUM
INJECTION
ASPIRATION
NUMBER OF CYLINDERS
DISPLACEMENT
BORE
STROKE
MANUFACTURER'S GROSS POWER RATING
RATED SPEED

CUMMINS QSB6.7	
DIESEL	
LIQUID	
DIRECT	
TURBOCHARGED & CHARGE AIR COOLED	
6	
409 CU IN	6.7 L
4.21 IN	107 MM
4.88 IN	124 MM
190 HP	142 KW
2400 RPM	2400 RPM

DRILLING FLUID SYSTEM

MAXIMUM DRILLING FLUID PRESSURE
MAXIMUM DRILLING FLUID FLOW
MAXIMUM DRILLING FLUID FLOW (AT PUMP)

1300 PSI	90 BAR
120 GPM	450 L/MIN
70 GPM	260 L/MIN

FLUID CAPACITIES

FUEL TANK
HYDRAULIC RESERVOIR

55 GAL	208 L
36 GAL	136 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.