



DITCH WITCH®

JT3020 MACH 1/ALL TERRAIN

We could say that the JT3020 Mach 1 is the strong, silent type, but there's nothing cliché about a mere 80 dBA coming out of a 156-hp (116-kW) turbocharged diesel engine. We could also say that the operator's station is a driller's dream, that the fluid pump is a long-wearing workhorse, and that it's got the best rack in the business. But don't take our word for it. With the JT3020 Mach 1 and All Terrain, drilling is believing.



KEY FEATURES

Cummins turbocharged diesel engine with "power bulge" automatically increases its torque to power through tough drilling conditions.

Operator's station—including an exclusive electronic information center—puts all drilling information and control at the operator's fingertips.

Field-proven, heavy-duty rack and pinion thrust drive with welded-on double rack offers minimum maintenance and maximum reliability.

DETAILS

Rugged, long-wearing fluid pump delivers 42-viscosity drilling mud at 50 gpm (189 L/min).

Heavy-duty anchor system uses as much torque as drills twice its size to anchor and hold in virtually any drilling condition; anchor motors don't have to be disconnected, so setup is quick and easy.

Open-top vise wrenches are angled toward the operator for an excellent view of the tool joint, and they require no daily maintenance.

Patented pipeloading system is field-proven and operator-approved, with hydraulically-powered shuttle grippers, hydraulic pipe row selection, and a single-pipeloading feature.

Industry-exclusive double-pivot drill frame allows steep entry angles without raising the tracks off the ground for maximum stability while drilling.

SPECIFICATIONS

JT3020

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
219.3 IN	5.57 M
79.4 IN	2.02 M
114.5 IN	2.91 M
21,660 LB	9825 KG
21,220 LB	9625 KG
10-16°	10-16°
19.4°	19.4°
17.7°	17.7°

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 (LINED)
WEIGHT OF DRILL PIPE AND LARGE BOX (48 PIPE)
WEIGHT OF DRILL PIPE AND SMALL BOX (25 PIPE)

118 IN	3.00 M
3 IN	76 MM
2.38 IN	60 MM
175 FT	53 M
90 LB	41 KG
5390 LB	2445 KG
2972 LB	1348 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 (LINED)
WEIGHT OF DRILL PIPE AND LARGE BOX (35 PIPE)
WEIGHT OF DRILL PIPE AND SMALL BOX (20 PIPE)

112 IN	2.85 M
3.25 IN	83 MM
2.23 IN	57 MM
175 FT	53 M
100 LB	45 KG
4594 LB	2084 KG
2783 LB	1262 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 (AT W/ ROCKMASTER 822)
BORE DIAMETER (AT W/ ROCKMASTER 86)
BACKREAM DIAMETER
GROUND TRAVEL SPEED (FORWARD)
GROUND TRAVEL SPEED (REVERSE)

225 RPM	225 RPM
400 RPM	400 RPM
4000 FT•LB	5423 N•M
800 FT•LB	1085 N•M
120 FPM	37 M/MIN
120 FPM	37 M/MIN
24,800 LB	110 KN
16,500 LB	73 KN
30,000 LB	134 KN
4.5 IN	114 MM
4.75 IN	121 MM
5.50 IN	140 MM
SOIL DEPENDENT	SOIL DEPENDENT
2.4 MPH	3.9 KM/H
2.25 MPH	3.6 KM/H

POWER

ENGINE
FUEL
COOLING MEDIUM
INJECTION
ASPIRATION
NUMBER OF CYLINDERS
DISPLACEMENT
BORE
STROKE
MANUFACTURER'S GROSS POWER RATING
RATED SPEED
PEAK GROSS POWER @ 2000 RPM

CUMMINS QSB4.5	
DIESEL	
LIQUID	
DIRECT	
TURBOCHARGED & CHARGE AIR COOLED	
4	
275 CU IN	4.5 L
4.02 IN	102 MM
5.42 IN	138 MM
148 HP	110 KW
2300 RPM	2300 RPM
156 HP	116 KW

DRILLING FLUID SYSTEM

MAXIMUM DRILLING FLUID PRESSURE
MAXIMUM DRILLING FLUID FLOW

1500 PSI	103 BAR
50 GPM	189 L/MIN

FLUID CAPACITIES

FUEL TANK
HYDRAULIC RESERVOIR

42 GAL	159 L
27 GAL	102 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.