



## SPECIFICATIONS, JT4020 MACH 1

### DIMENSIONS

|                          | U.S.      | METRIC    |
|--------------------------|-----------|-----------|
| Overall machine length*  | 337 in    | 8.56 m    |
| Overall machine width*   | 87 in     | 2.21 m    |
| Overall machine height*  | 96 in     | 2.44 m    |
| Operating weight         | 27,700 lb | 12,565 kg |
| Entry angle*: 10° to 16° |           |           |
| Angle of approach: 17°   |           |           |
| Angle of departure: 13°  |           |           |

### POWER PIPE

|                                            | U.S.    | METRIC  |
|--------------------------------------------|---------|---------|
| Length of drill pipe, nominal*             | 177 in  | 4.5 m   |
| Diameter of drill pipe, tool joint end*    | 3.5 in  | 89 mm   |
| Diameter of drill pipe*                    | 2.81 in | 71 mm   |
| Bend radius, minimum                       | 190 ft  | 58 m    |
| Weight of drill pipe*                      | 158 lb  | 72 kg   |
| Weight of drill pipe & large box (32 pipe) | 6000 lb | 2720 kg |
| Weight of drill pipe & small box (16 pipe) | 3100 lb | 1410 kg |

### OPERATION

|                                                    | U.S.       | METRIC   |
|----------------------------------------------------|------------|----------|
| Spindle speed, maximum*: 240 rpm                   |            |          |
| Spindle speed, maximum (at inner spindle): 250 rpm |            |          |
| Spindle torque, maximum*                           | 5000 ft·lb | 6800 N·m |
| Spindle torque, maximum (at inner spindle)         | 2000 ft·lb | 2700 N·m |
| Carriage thrust travel speed*                      | 120 fpm    | 37 m/min |
| Carriage pullback travel speed*                    | 120 fpm    | 37 m/min |
| Thrust force*                                      | 36,000 lb  | 160 kN   |
| Pullback force*                                    | 40,000 lb  | 178 kN   |
| Bore diameter                                      | 5 in       | 127 mm   |
| Backream diameter: Soil dependent                  |            |          |
| Ground travel speed (forward)*                     | 2.5 mph    | 4 km/h   |
| Ground travel speed (reverse)*                     | 2.5 mph    | 4 km/h   |

### POWER

|                                              | U.S.       | METRIC        |
|----------------------------------------------|------------|---------------|
| Engine: Cummins QSB6.7                       |            |               |
| Cooling medium: Liquid                       |            |               |
| Injection: Direct                            |            |               |
| Aspiration: Turbocharged & charge air cooled |            |               |
| Displacement                                 | 409 cu in  | 6.7 L         |
| Bore                                         | 4.21 in    | 107 mm        |
| Stroke                                       | 4.88 in    | 124 mm        |
| Manufacturer's gross power rating**          | 190 hp     | 142 kW        |
| Rated speed: 2400 rpm                        |            |               |
| Emissions Compliance                         | EPA Tier 3 | EU Stage IIIa |

| DRILLING FLUID SYSTEM                  | U.S.     | METRIC    |
|----------------------------------------|----------|-----------|
| Drilling fluid pressure, maximum*      | 1300 psi | 90 bar    |
| Drilling fluid flow, maximum*          | 120 gpm  | 450 L/min |
| Drilling fluid flow, maximum (at pump) | 70 gpm   | 260 L/min |
| FLUID CAPACITIES                       | U.S.     | METRIC    |
| Fuel tank                              | 55 gal   | 208 L     |
| Hydraulic reservoir                    | 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. Contains patented features. \*Per SAE J2022 \*\*Per SAE J1995

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