

ROCK TOOLS

ROCK-IT MUD MOTORS

- High performance mud motor designed specifically for HDD
- High torque to flow ratio means you get more drilling power with less fluid
- Can be operated at a slower speed for use with tri-cone bits
- High quality internal parts results in more drilling time before regular maintenance is required
- Bearing packs are designed to be completely sealed
- Rotors and stators are designed for HDD. They are shorter in length to help with the steering of the motor. All stators are manufactured with a new "hard" nitrile rubber resulting in more power from the motor
- All Rock-It motors are built tough to withstand the harsh conditions of horizontal drilling. Stator tube walls are twice as thick as other brands maximum durability



| Rock-It Mud Motors | | | | | | |
|--------------------------------------|------------------------|------------------------|-------------------------------------|-----------------------|--|---|
| Standard Size | Torque Rating (ft-lbs) | Rotational Speed (rpm) | Flow Requirements (gpm @ 1,000 psi) | Operating Range (psi) | Recommended Bit Size | Recommended Drill Rig |
| 3" $\frac{1}{8}$ Lobe | 250 | 80-346 | 20-60 | 350 | 3 $\frac{1}{8}$ " to 4 $\frac{1}{2}$ " | D24x40, D33x44, D40x40, JT2720, JT2720 Mach 1, DD3238 |
| 3 $\frac{1}{2}$ " $\frac{1}{8}$ Lobe | 325 | 70-240 | 40-100 | 500 | 4 $\frac{1}{2}$ " to 5 $\frac{1}{2}$ " | D36x50, D40x40, JT3020 Mach 1, JT4020 Mach 1, JT4020, DD4, DD4045 |
| 3 $\frac{3}{4}$ " $\frac{1}{8}$ Lobe | 1,200 | 200-400 | 100-170 | 350 | 5 $\frac{1}{4}$ " to 6 $\frac{1}{4}$ " | D50x100, D55x100, D60x90 |
| 4 $\frac{1}{4}$ " $\frac{1}{8}$ Lobe | 1,200 | 180-370 | 100-170 | 350 | 6" to 7 $\frac{1}{8}$ " | D80x100, JT7020 Mach 1, D60x90, DD6 |
| 5" $\frac{1}{8}$ Lobe | 2,500 | 105-230 | 140-300 | 600 | 6" to 7 $\frac{1}{8}$ " | D100x120, D100x140, JT8020 Mach 1, JT100 Mach 1, DD10, DD140B, DD9014 |
| 6 $\frac{1}{4}$ " $\frac{1}{8}$ Lobe | 5,000 | 70-150 | 200-500 | 500 | 8 $\frac{3}{4}$ " to 9 $\frac{1}{8}$ " | Maxi-Rigs |
| 8 $\frac{1}{2}$ " $\frac{1}{8}$ Lobe | 5,000 | 70-150 | 200-500 | 500 | 10 $\frac{1}{8}$ " to 12 $\frac{1}{4}$ " | Maxi-Rigs |

Mud Motors available in more sizes and configurations. Call for a complete selection.

SANDVIK® TRI-CONE ROCK BITS

For drilling in solid rock



- Designed specifically for HDD applications in rock (up to 30,000 psi)
- Maximum gage and leg protection for longer bit life
- Tungsten carbide inserts available in a variety of tooth profiles
- Sealed friction bearing system

| Sandvik HDS+ Series HDD Tri-Cone Rock Bits | | | | |
|--|--|---------------------------|---------------------------|------------------------------|
| Diameter | Thread Size (Soft to Medium/Hard Formations) | | | |
| | 2 $\frac{3}{8}$ " API Reg | 2 $\frac{7}{8}$ " API Reg | 3 $\frac{1}{2}$ " API Reg | 4 $\frac{1}{2}$ " IF API Reg |
| 3.875" | 1538-HDSP-55 | | | |
| 4.75" | | 1547-HDSP-58 | | |
| 5.5" | | 1555-HDSP-55 | | |
| 6.5" | | | 1565-HDSP-70 | |
| 7.875" | | | | 1578-HDSP-95 |
| 8.75" | | | | 1587-HDSP-95 |

Other bit configurations available for harder formations. Call for a complete selection.