



HAMMR Drill

Downhole agitator pressure pulsation device



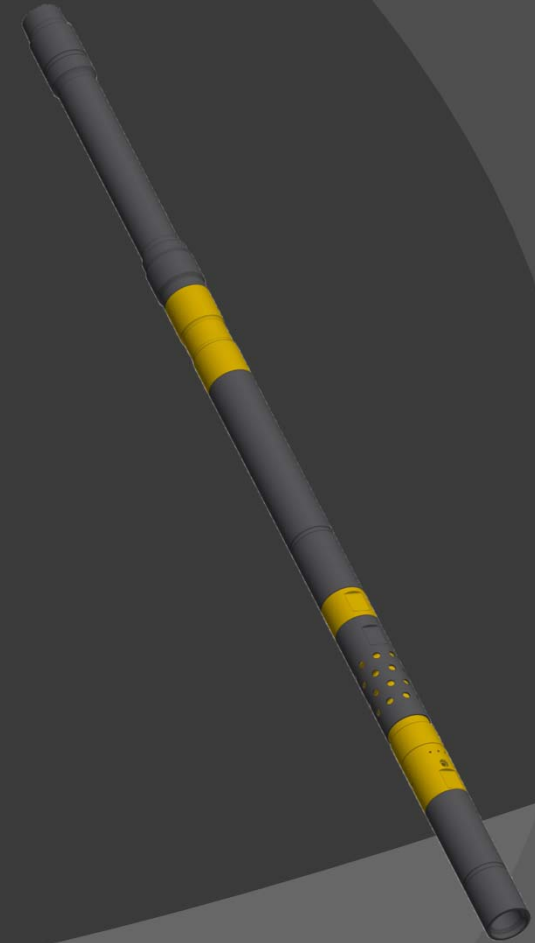
HAMMR Drill

- 🌀 Introduction to tool
- 🌀 Features
- 🌀 Benefits
- 🌀 Specs
- 🌀 Contact Information
- 🌀 WOS Overview & Locations



HAMMR Drill Overview

- ④ The Workover Solutions HAMMR Drill Thru-Tubing motor combines the function of a percussion hammer with the drilling action of a mud motor.
- ④ This technology allows for torque, RPM, hammer mass and vibration to be utilized during drilling operations.
- ④ During operations, the hammer functionality only activates when the bit / mill is met with resistance.
- ④ The HAMMR Drill uses a mud lubricated cam mechanism powered by the rotor of the motor to accelerate the hammer-mass. The hammer mass strikes the bit box several times per second, delivering an intense percussion force overlaid on the bit or mill. In addition, reactive percussion forces cause the motor housing and drill string to vibrate, reducing friction between the wellbore and drill string or coiled tubing.
- ④ Designed for long-life, the hammer-mass and thrust bearing balls act as wear components and are easily replaced and serviced.



Features

- ⌚ Allows for maximum weight on bit to be transmitted during drilling operations
- ⌚ Hammer mass strikes the bit box several times per second, delivering an intense percussive force overlaid on the bit or mill
- ⌚ Doubles as a hammer and mud motor
- ⌚ Replaceable wear components
- ⌚ Adjustable impact force



Benefits

- ⌚ Increases Energy at the bit for a 20% to 60% increase in ROP
- ⌚ Protects against motor stalling and bit stuck situations
- ⌚ Reduces friction between work string and casing wall
- ⌚ Reduces non-productive time eliminating a trip operating as a motor if HAMMR mass wears
- ⌚ Reduces tool wear only activating when resistance at the bit/mill is encountered
- ⌚ Requires less specific energy to drill



HAMMR Drill Specs

HAMMR Drill Specs		
Tool Size (in)	2.88"	3.125"
Make Up Length (in)	182"	194"
Flow Rate (bpm)	3.0 - 5.0	3.0 - 5.0
Frequency (hz)	7 - 15	9 - 17
Weight (lbs)	290	350
Tensile Yield (ft-lbs)	128,000	152,000
Torisonal Yield (ft-lbs)	1,500	3,000
Tool Connections	2-3/8" REG Box x Pin	2-3/8" REG Box x Pin

Contact Information

To secure the highest quality of tools engineered, manufactured and tested in the USA contact your local WOS representative or contacts below

Main phone - 346-774-4433

Email - sales@wos.com

WOS Company Overview

- 🌀 Started Operations in Q3 2015
- 🌀 Fully Supported Downhole Tool Division
 - Design & Engineering
 - Machining & Fabrication
 - Field Operations
 - Rebuild & Redress
 - Evaluate Performance
- 🌀 Wireline
 - 4 trucks in the Northeast and 2 in West Texas
 - Started operations in July 2018
- 🌀 Operational Coverage
 - Pennsylvania, Ohio, West Virginia, and New York
 - Texas, New Mexico
 - North Dakota, Wyoming
 - Louisiana



WOS Locations

