

# FALCON Reamer



## **Streamlined design and reduced torque delivers high-quality wellbores and greater operational efficiency for the MENA region**

Our next-generation Falcon™ reamer is based on our proven dog leg (DL) reamer borehole conditioning tool, which has a history of more than 3,000 successful runs worldwide and has significantly helped operators throughout the Middle East and North Africa (MENA) region reduce costs and increase efficiency. The MENA market has the most challenging and diverse drilling applications in the world, and with operators drilling deeper and farther than ever before, we've taken the necessary steps to ensure our next generation of reamers meets your hole-conditioning requirements.

The Falcon reamer tool was specifically developed and tailored to address borehole conditioning needs in the MENA market. The Falcon reamer improves wellbore quality, facilitates tripping and running casing or production strings, improves weight transfer, and reduces torque and hole tortuosity in high-angle and complex-trajectory wells. The Falcon reamer's new blade layout features boomerang-shaped blades and a large radius on the leading edge to greatly increase contact area with the borehole while reducing torque. Our unique, in-house developed Multifunctional Advanced Placement Software (MAPS™) ensures optimal placement in the drillstring, guaranteeing maximum tool efficiency. The Falcon reamer tool is also fitted with ReedHycalog's industry-leading grades of polycrystalline diamond compact (PDC) cutters, making the Falcon reamer the most efficient, cost-effective solution for enabling MENA operators to reach the technical limits of today's drilling challenges.



## Features

### One-piece construction

The Falcon reamer is manufactured from a single piece of steel containing material properties that optimally match the connection tool requirements. The one-piece construction ensures a strong, robust design that is properly paired with the adjacent drillstring components.

### Dual-height, dual-function blade design

By utilizing active blades set higher than the passive blades, the tool both conditions and slightly enlarges the wellbore to significantly improve the efficiency of the tool. This enlargement ensures that the bit will be able to pass through the wellbore without the need for backreaming and that casing or completions can be landed quickly and successfully.

### Multifunctional Advanced Placement Software (MAPS)

MAPS, which is our exclusive in-house-developed software, enables Falcon reamer placement in the bottomhole assembly, where it is most beneficial from a borehole conditioning perspective. Accurate placement also ensures there are no negative effects on the bending stresses or contact forces at any point in the interval through which the tool will be run.

### Low-torque cutting structure

We designed the Falcon reamer to generate less than 5% of the reactive torque generated by the bit with which it is used. In most applications, this results in reduced surface torque when compared to similar offset runs that do not include the Falcon reamer in the string.

### Bi-directional cutting structures

Enhanced cutting structures ensure that the tool is actively improving the wellbore when drilling ahead, as well as when the string is rotating and moving in either direction.

### Maximized tool internal diameter

This intentional design helps to minimize pressure loss through the tool; it also allows fishing of most retrievable measurement-while-drilling (MWD) components.

### Re-engineered blade layout

Our tool's blade layout offers maximum protection to the cutting structure during drillout and increases the blades' efficiency when agitating cuttings on the low side of the wellbore in high-angle directional applications. The rounded, continuous blades have been designed to afford greater gauge protection in highly abrasive applications while improving sliding efficiency in high-angle positive displacement motor applications.

### Large selection of premium PDC cutters

The cutter type on the Falcon reamer can be optimized to suit the demands of each specific application.