



TPCR™

Multi-Tool for Drilling Operations



The OTS TPCR™ (Tapered Profile Concentric Reamer) was designed as a multi-function drilling tool. With the advent of rotary steerable systems, new casing programs and more challenging formations, the TPCR™ allows drilling engineers to have a tool on-site with multiple uses.

Improved Bit Stability – the TPCR™ can be run behind a smaller diameter PDC bit to drill larger hole. An 8-1/2" pilot bit with 12-1/4" TPCR™ is a 12-1/4" drilling tool with a secondary gage pad area to inhibit lateral movement. This stabilizes any bit for harder formations and reduces drilling torque. Larger TPCR™ tools are available and designed to accept nominal sized pilot bits.

Improved Hybrid Drilling – by employing a milltooth or insert bit as the pilot, the TPCR™ can drill difficult formations that traditionally damage standard PDC designs. With a roller cone pilot bit, the self-centering design of the TPCR™ stabilizes the roller cone bit for better weight transfer. Once the pilot hole has been drilled, it is stress relieved and the TPCR™ can enlarge it to full diameter. Operators are free to select their preferred roller cone bit.



Hole Opener – the TPCR™, with pilot bit or a bullnose, is a functional PDC hole opener, improving both ROP and tool life over conventional hole openers. The spiral blades and high cutter density of the TPCR™ ensure a full diameter hole when compared to traditional 3-point contact tools.

In-String Reamer – the TPCR™ can be placed anywhere in the BHA for hole enlargement. In cases where vibration is excessive, the TPCR™ can be placed above the LWD. This allows an 8-1/2" bit to drill the pilot hole with less energy below the LWD, while the TPCR™ enlarges the hole.

Wiper Bit – with either a bullnose or a bit on the end, the TPCR™ is an excellent choice for making wiper trip runs. With PDC cutters and self-centering design, maximum diameter is delivered when compared to a roller cone bit. The TPCR™ ensures full wiping of filter cake prior to logging runs due to its spiral blade design.



NEXT GENERATION INNOVATION



TPCR™
Drilling Multi-Tool