

# GaugePro Echo on-command digital reamer

Eliminate the unknowns—control and confirm reamer operations in real time

**The GaugePro™ Echo on-command digital reamer** from Baker Hughes advance reaming capability for better economics by putting real-time downhole tool control in the hands of the operator. Through proprietary technology, unknowns are known, limitations are removed, and nonproductive time (NPT) is reduced as flexibility, controlled operation, hole enlargement, and rathole drilling work together.

## Gain control and confidence with real-time communication

The wired capabilities of the GaugePro Echo reamer enables operators to use real-time commands to deliver unlimited blade activation and deactivation, and receive information on blade status and position, oil pressure, oil temperature, and vibration. This rapid response saves a trip by confirming tool functionality, provides operational insights into downhole conditions, and allows for fast adjustment of drilling parameters so that runs can be extended even farther.



## Applications

- Deepwater drilling
- Remaining rathole drilling
- High cost-per-foot drilling
- Salt and unconsolidated formations drilling

## Benefits

- Provides limitless activation and deactivation cycles
- Communicates real-time reamer status, blade position, hole diameter, etc.
- Reduces activation time to fewer than four minutes
- Operates independently of pump flow rates
- Eliminates a separate rathole trip when run as a near-bit reamer
- Supports independent open/close of up to three reamers
- Compatible with wired pipe
- Triple-redundancy failsafe functionality provides reliable blade deactivation

## Work smarter, not harder

The GaugePro Echo digital reamer aids intelligence to eliminate the extra steps and constraints typical of other reamers. It operates independently of drilling parameters and pump flow rates, can be placed multiple times anywhere within the bottomhole assembly, and drills and reams in one run—all the way to the last 15 feet (4.6 meters) of the rathole.

## Mitigate NPT and risks

In high cost-per-foot applications, every minute saved impacts the bottom line. The GaugePro Echo digital reamer dramatically reduces expensive NPT incurred with other mechanical and hybrid digital reamers that limit drilling parameters, stop operations, force drillers to pull out of hole prematurely, and require a second rathole trip.

Drilling and reaming the rathole in one run reduces pipe handling and rig floor time, along with associated HSE risks. Additionally, triple-redundancy failsafe measures ensure that the reamer always trips out of hole, so that operators can stay on schedule.

When run with Baker Hughes drill bits, the GaugePro Echo reamer makes for even smoother, energy-focused reaming that creates less vibration, protects tools, and drills faster. The premium cutters used on the GaugePro Echo reamer increase ROP and provide durability to smooth out longer runs, and up-drill cutters eliminate swelling sections when tripping out of hole. And with an integral stabilizer, steerability is improved when used with rotary steerable systems.

For more information on how the GaugePro Echo digital reamer can help you eliminate the unknowns and work smart in reaming operations, contact your Baker Hughes representative today.



The GaugePro Echo reamer lets operators control and adjust the reamer's actions at all times with no limits on activation/deactivation cycles.

**Baker Hughes** 