

Part of the FUSION™ MWD high performance technology platform

REAL DATA IN REAL-TIME

The HAWK is an integrated downhole vibration measurement tool and software platform that enables operators to detect and mitigate drilling conditions as they occur in real-time.

Information delivered by the HAWK allows operators to optimize drilling parameters, to minimize wasted mechanical energy, prevent equipment damage, and reduce the number of unnecessary trips through drillstring vibration and shock monitoring:

- 3-axis amplitude and frequency measurements in the bottom hole assembly (BHA) complement surface measurements and allow drillers to detect damaging levels of downhole vibration that would otherwise be undetectable on surface recording devices.
- The HAWK's proprietary software enables drillers to set programmable thresholds, view real-time shock loads, identify excessive vibration and quantify benefits of potential changes to specific drilling parameters.
- After bit runs, the HAWK's memory data is merged with the electronic data recorder (EDR) to accurately analyze optimal performance for each BHA and generate diagnostic reports on the status of internal tool health to identify potential issues before they arise.

BENEFITS

- **Achieve higher rate of penetration (ROP)** by minimizing wasted mechanical energy.
- **Increase bit life** and reduce premature bit damage.
- **Improve drilling performance** by modeling optimal drilling parameters.
- **Increase savings** by identifying failed and under gauged bits, therefore eliminating reaming costs.
- **Reduce non-productive time (NPT)** caused by tool damage.

APPLICATIONS

The HAWK is designed to improve the drilling efficiency for any application on the FUSION EM platform.

MINIMIZE WASTED MECHANICAL ENERGY,
PREVENT EQUIPMENT DAMAGE, AND
REDUCE UNNECESSARY TRIPS.

HAWK FEATURES

- ✓ Downhole measurements: lateral and axial shock values, amplitude and frequency of dominant vibrations, string revolutions per minute (RPM) at the BHA, and internal measurement-while-drilling (MWD) system status checks.
- ✓ High frequency vibration and shock data acquisition.
- ✓ Compatible with EDRs for real-time viewing.
- ✓ Post run analysis to accurately analyze optimal performance for each BHA.
- ✓ Diagnostic feature to generate reports on internal tool health.

MEASUREMENT

The HAWK vibration monitoring system monitors downhole conditions enabling drillers to make informed decisions in real-time.

220 HOURS
Duration at
Maximum Resolution

48 MB
Memory

3 1/8 TO 9 1/2"
79-241mm
Available Sizes

-40 TO 302°F
-40-150°C
Operating Temperature

