

Oculus™

AUTOMATED DULL GRADING BIG DATA AND ANALYTICS

OVERVIEW

Halliburton is proud to release Oculus, the first of its kind automated dull grading system that is fully integrated into the solution creation process.

Oculus is a state-of-the-art system utilizing computer vision and machine learning algorithms to capture precise dull data for every cutter on every Halliburton Drill Bits & Services bit.

Accurate dull bit forensics has always been a key tenant of delivering superior drill bit performance. Engineers must fully understand the problem before they can develop the solution.

Oculus transforms this critical process from one that is largely subjective into something that is data driven. It increases the potential number of data points analyzed from single digits to potentially thousands of relevant offsets.

In addition to efficiently capturing the dull data for every cutter, Oculus also provides modern analysis and visualization tools. Utilizing big data analytics techniques and cloud infrastructure HDBS can seamlessly correlate all relevant data streams and integrate them into the DatCISM design process.



For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

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FEATURES

» Computer Vision and Machine Learning

- Object Identification
- Damage Classification
- Damage Severity Measurements

» Advance Analysis Techniques

- Big data analytics
- Data stream integration
- Web based visualization tools

BENEFITS

» Cutter Development

Increased velocity of new PDC Cutter technology deployment based on faster and more accurate problem identification.

» Cutter Selection

Optimized selection of existing cutter technologies to fit application specific challenges.

» Drill Bit Development

Improved bit comparison and selection process. Provides statistical root cause evaluation and a correlation opportunity to validate design feature enhancements.

Halliburton Drill Bits & Services is offering the most advanced automated dull grading big data analytics system in the market.

We offer to our customers a service with the following milestones:

- » All repair facilities
- » 24 countries
- » 15,000+ bits scanned
- » 500,000+ cutters graded

This scale of information will allow us to quickly understand the current customer challenges and to better customize our drill bits offering in order to overcome our customers well construction challenges.