RHINO

Real-Time Orebody Knowledge

IoT Sensor Package

Our Seismic-While-Drilling solution is installed on production drills to upgrade a site's orebody knowledge.

- SWD uses signal processing and machine learning algorithms to transform vibrations from drilling into rock properties
- Placed on a production drill string above the deck for optimal positioning and easy installation
- Designed to be “set and forget” with minimal interaction from drill and blast personnel

Upgraded Orebody Knowledge

High-resolution measurements that exceed the accuracy of averaging blast hole properties.

- Captures 1-5 cm resolution, incrementally
- Measures compressive strength, modulus, velocity, and density
- Accurately detects joint spacing, fractures and faults, lithology changes, grade indicators, and ore/waste boundaries
- Proven environments in hard rock, fractured copper/gold poryphyry, soft iron ore, hard taconite, banded iron formations, coal, mudstone, sandstone

"By measuring and optimizing each blast, you can sort the muck pile much faster, getting the waste rock out and the small ore into the process stream, this is where the big benefits are delivered."

Angus Melbourne, CCO Orica

DataCloud

KNOW THE ROCK

knowtherock@datacloud.com www.datacloud.com

RHINO + MINEPORTAL IoT sensors and cloud computing optimizing from the drill to the mill.

DataCloud
KNOW THE ROCK

RHINO provides accurate and upgraded geology data for increased throughput and reduced dilution. Combined with MinePortal, mines can optimize their entire operations.

The problem with existing systems is teams receive a database full of numbers, not insights. A data point for every fraction of a foot, or fraction of a meter, is too much to be reviewed in Excel to quickly make data-driven decisions.

We use MinePortal to integrate your data into a 3D model and visualize your data by hardness or any other property that gets you closer to your production goals.

Value of Plug and Play Integration with MinePortal

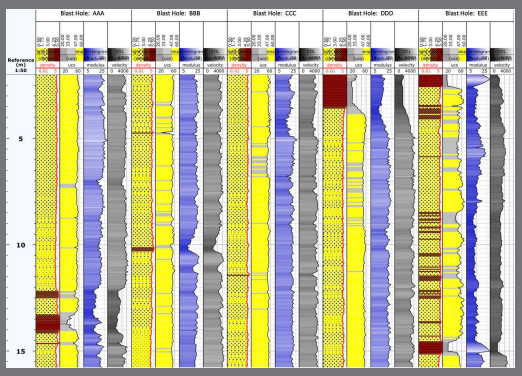
- Once in MinePortal, your subsurface insights are cross analyzed with other data streams during production
- Operators can seamlessly leverage machine learning techniques to detect geological trends, inform the mill of incoming rock, and generate next bench projections

"One of the shifts that I see with this technology is being able to take things to a level of detail that has never been possible in the past."

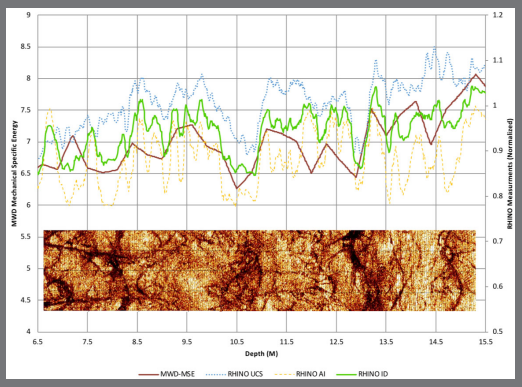
Graeme Peters, TSE Orica

3 Proven Applications

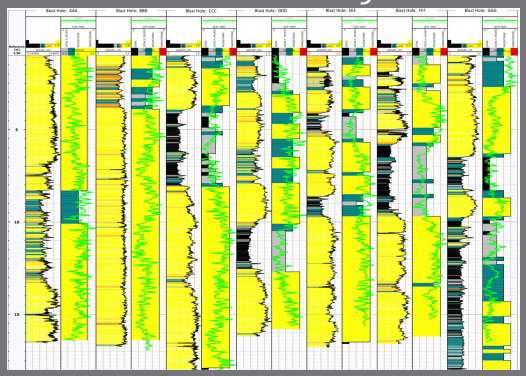
1. Iron Ore



2. Base Metals



3. Metallurgical Coal



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