

How It Works

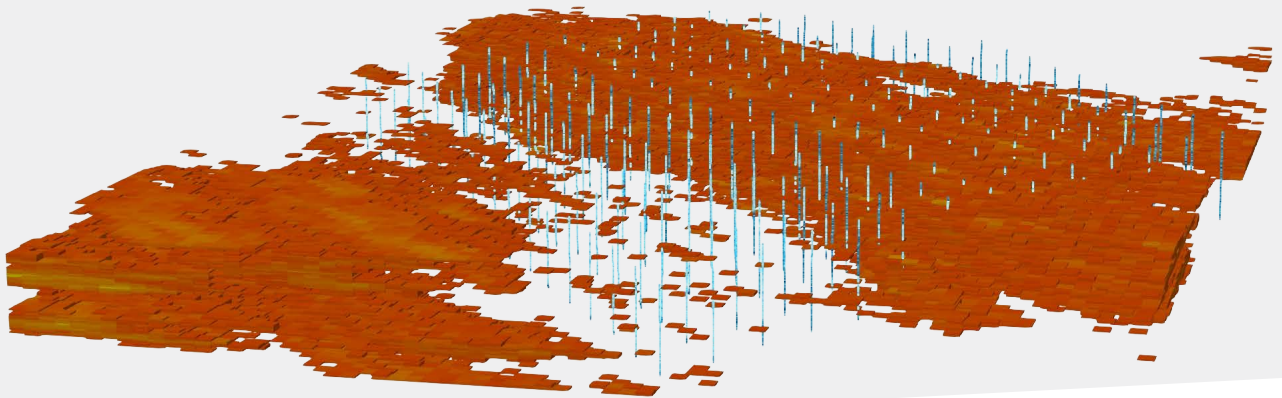
Holistic Orebody Knowledge Via Browser Log in

MinePortal

MinePortal connects to a mine's databases of orebody knowledge to automatically identify the boundary between overburden and coal, help generate recommended "stand-off" distances, and predict the depths of coal in subsequent benches. The power of cloud computing allows MinePortal to ingest and process information in near real-time while applying our proprietary geostatistical and machine learning algorithms.

RHINO

Our blasthole measurements package is easily installed on production drills to enhance geology data right from the source. Vibration signatures in the drill steel are acquired via IoT enabled sensor devices and wirelessly transmit to an edge device in the cab. Initial processing is performed on the edge device prior to compressing the IoT data and streaming it to the cloud via cellular or WiFi networks to MinePortal for remaining analysis.



Value

Increase Operational Reliability and Improve coal Recovery

Bulk density and natural gamma radiation are the standard practices in coal seam detection. These methods can be inaccurate and costly with lengthy turnaround times. These shortcomings are magnified with challenging geology and typically negate any gains in precision. MinePortal's ability to accurately identify and recommend the top of the coal seam minimizes coal loss by adding certainty to the seam location. Consistent and timely seam detection improves reliability and productivity of planning, drill, and blasting activities. Ultimately, a typical coal mine can recover an estimated \$10M/yr loss due to poor coal seam detection.