

A Connected Orebody Knowledge Platform



Challenge

Increasing Waste Material on Top of Coal Seams Magnifies Inefficiencies

A healthy demand for metallurgical coal continues to place pressure on existing production mines to meet or exceed aggressive production targets. Operation teams are caught in the middle with little recourse as the geology typically increases in difficulty through the life-of-the-mine. While current practice of trial-and-error for coal seam identification has been sufficient in the past, the slow feedback loop and lack of precision drive up costs and hurt the mine's bottom line. For example, lack of coal seam precision causes redrills due to under drilling or backfilling due to over drilling through the seam.

Solution

DataCloud Increases Coal Seam Detection's Speed and Reliability

Identifying geological structures during production, such as the coal seam, can remedy the loss of productivity from complexity. With the deployment of orebody knowledge tools production drilling data is transformed into actionable insights. Staff quickly and automatically receive accurate coal seam depths, enabling them to streamline operations. These insights are integrated with blasting software for near-real time updates of the coal surface. Teams can plan drilling with recommendations for "stand-off" distance from the coal seam, eliminate unnecessary blast damage, and minimize waste material, dilution, to downstream processing.

MinePortal: Quickly Update Coal Seam Models in Pattern



Mine Thin Seams, Reduce Over Drilling And Blasting in Coal

1% reduction of lost coal yields \$1.5M of additional revenue*



Inaccurate Coal Model



Drilling into Top of Coal

Insufficient Standoff Distances

Inadequate Back Filling Controls

*at a price of USD \$175/ton

