Universal Field Robots

UFR Hole Prep

Improving the drill and blast process for underground mines can yield enormous productivity gains.

UFR Hole Prep is designed to autonomously inspect and prepare blastholes for charging. The data is then used by the production engineers to optimise the charging plan. An additional attachment with a gyroscope can be used to accurately trace the hole and determine the position of the toe, returning a full trace of every hole to the engineering team.

This can further improve the ore extraction process by minimising over and under break as well as preventing potential hangups. With this you can remove significant safety risk to manual operators, reduce ore dilution and add to your bottom line.

Traditional methods of inspecting, prepping and logging holes require operators to work in dangerous conditions. UFR Hole Prep removes the need for frontline operators and therefore removing significant risk to workers.

CUSTOMER CHALLENGES

Universal Field Robots

Safety

Safety is a top priority for any mining operation, and the UFR Hole Prep addresses the challenge of maintaining a safe workplace by automating the hazardous task of inspecting and prepping drilled holes. These tasks pose significant safety risks to human operators due to the high risk of falling debris and equipment failure. With UFR Hole Prep, mines can improve their safety record by eliminating the risk of workplace accidents associated with these tasks. By adopting the UFR Hole Prep, mining companies can take a major step towards a safer, more efficient, and productive operation.

Efficiency and Data Collection

Efficiency and data collection are crucial factors for mines to ensure they are operating at maximum capacity and profitability. The UFR Hole Prep helps improve efficiency by automating the laborious and high-risk task of underground hole measurement, allowing for a faster and more accurate assessment of drilled holes. By providing accurate data on each hole, mining engineers can optimise blast patterns, leading to more consistent blasts and reducing the risk of over or under break. Additionally, the data collected by UFR Hole Prep can be integrated with other mine data systems, providing valuable insights into the overall performance of the mine and helping to identify areas for improvement.

UFRAUTONOMY

UFRautonomy works by integrating software and hardware with machines to enable them to operate autonomously or under tele-remote control.

This includes sensor, control, and communication systems that work together to enable the machine to perform a suite of tasks. UFRautonomy software allows for the creation of custom applications tailored to specific customer needs, which can be further customised to enable autonomous operation, remote operation, or a combination of both.

Multidimensional sensors and dedicated software combine to deliver a multi-layered safety system that meets the industry standards.