



Precision Engineering

Case study

Location: Finland

Customer: Sandvik Mining

Growth driver: Resource Scarcity



Dust filter valves make drill rigs safer, more efficient

Requirement

Surface top hammer drill rigs can only operate reliably if the dust they generate is removed from the path of the drill to prevent the drill string from jamming. However, the dust cannot simply be exhausted, as respirable particles present a significant health and safety hazard. Sandvik Mining, a global equipment and tool supplier, solves the loose dust problem by integrating compressors and patented jet pulse dust collectors directly on their surface top hammer drill rigs.

Dust-laden air flows into sock-shaped filter bags, where the dust collects, or “cakes,” on the outside. Timed blasts of compressed air shake the cake into the collector so it can be discarded safely. Frequent jet pulse cleaning of the filter bag requires fast acting, long lasting valves to control the air pulse

Solution

IMI Buschjost valves help Sandvik keep their dust collectors operating at peak efficiency by:

- Opening in milliseconds so air pressure builds quickly to deliver an intense burst that cleans the filter bag most effectively
- Reducing energy consumption
- Being explosion-proof up to hazardous area 1/21
- Operated by a unique one-piece diaphragm rather than a spring
- Performing consistently across a temperature range from -40°F to 284°F (-40°C to 140°C)

The Sandvik dust collection system can be used anywhere in the world to protect workers from dust regardless of temperature. Using the same valves across the complete range of blast hole drill rigs simplifies ordering specifications.

For more information go to:
www.norgren.com/us/mining

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