

Filtration Group application example – Air filtration (FE)

Filtration Group dust filter cartridges for use in rock crushers



Agriculture &
Construction

Initial situation

Our customer is a globally active company and is one of the top 10 industrial companies in Scandinavia. In one of its divisions, it is a leading manufacturer of products used in the mining and construction industries. These include mobile rock crushers. These are used in mining and road construction to destroy and crush rocks and rock formations. As many small stones and rock dust are produced during this stone processing, this highly aggressive rock dust must be extracted and the air cleaned. Otherwise, the machines, equipment and health of the operators would be severely damaged. Filtration Group uses filter elements of type 852 625 Ti 15-0.8 for this application.



Solution statement

- Filtration Group has selected cylindrical dust filter cartridges with an open pleat for this application, as they have a very high dust load
- Use of Ti 15, a very smooth and easily cleanable filter material with a high mechanical resistance
- Filter material can also be used very well in wet conditions, as it is an optimized polyester material
- Long service-life due to the surface filtration used
- Greater strength during the cleaning process and the pressure fluctuations present here through the use of a banderole



Customer value

- Reduced risk of blocking due to high humidity due to open pleat
- Mechanical stabilisation of the filter elements during cleaning by the use of a band
- Increased service life due to the use of Ti 15 filter material with open pleat and band and associated use of surface filtration
- Cost savings by extending the service life and reducing set-up times
- Faster assembly due to the use of RD 60 thread



Challenge

Filtration Group dust filter cartridges with open folding for the extraction of stone dust with a very high dust load. The dust to be extracted is very aggressive and humid due to dew point underruns due to the rock crushers working in the open air, in tunnels or underground. There is a risk of damage to the filter due to small, sharp-edged stones. The cleaning pressures can also vary greatly due to the mobile technology. Filtration Group dust filter cartridges ensure high mechanical strength to ensure optimum use of the mobile equipment.

Technical data

- Filter elements: 6 x 852 625 Ti 15-0.8
- Filter material: Ti 15 – optimised polyester fleece with a filter area of 0.8 m² per element
- Installation on the raw gas side via a threaded connection RD 60 x 4 on the filter plate
- Outer diameter cylindrical 115 mm
- Length: 600 mm
- Banderole for higher strength

