

DUST COLLECTION
IN THE QUARRYING
AND
STONE WORKING SECTOR

Herding
pure productivity
FILTERTECHNIK



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THE ENVIRONMENT

Dust produced during quarrying and in follow-up stone working processes is a strain on the environment. Quartz dust in particular poses an extreme risk to man and machine. This risk can be eliminated by the use of suitable filters.



CONVENTIONAL FILTER TECHNOLOGY

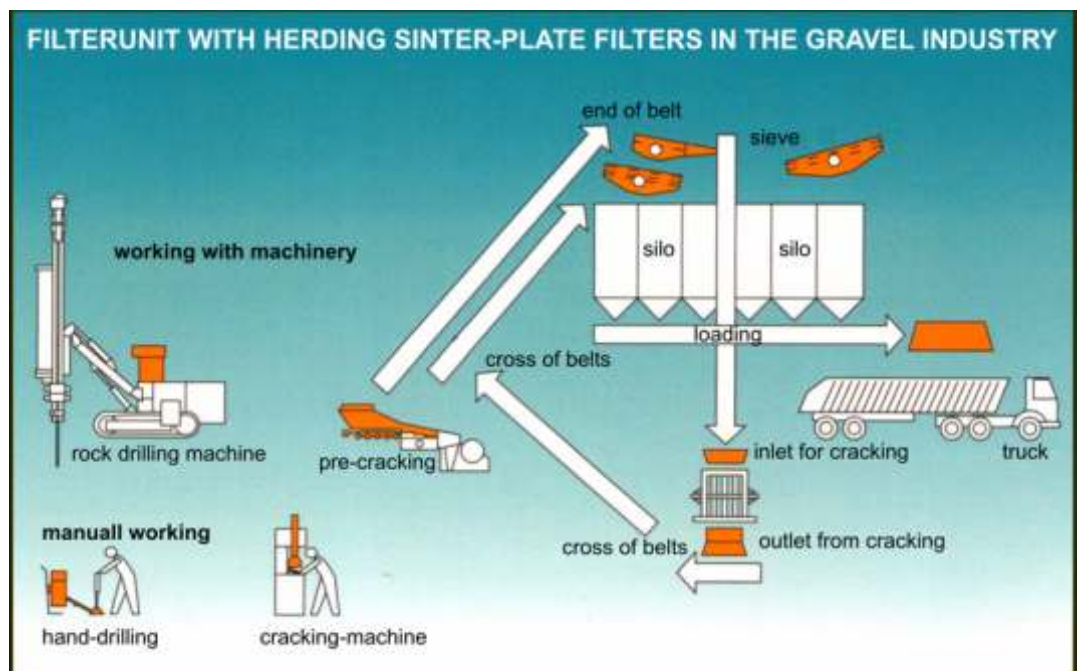
Conventional filter media are usually made of woven textile or plastic fibers. They act as deep-bed filters, which means that the dust penetrates deep into the fabric. Cleaning these filters requires them to be moved mechanically, subjecting them to severe wear. Coated filters are no exception. Flexing takes place inside the filter medium itself, be it coated or uncoated. The wear is clearly visible in the picture. It occurs wherever the filter medium rests on a support element.

HERDING FILTER TECHNOLOGY

The Herding sintered plate filter is absolutely rigid and works by the principle of surface filtration. This results in the following advantages: ▶ Practically no wear because no dust gets into the filter medium on the one hand and the filter medium is not moved on the other. ▶ The filter medium does not have to be replaced, hence there are no expensive downtimes and no regular maintenance intervals. ▶ An automatic cleaning and filter control system enables constant conditions of operation.

FILTERS FOR STONE WORKING PROCESSES

Herding sintered plate filters of compact design have a long track record of success in the quarrying and stone working sector. The filters can be adapted to a customer's individual wishes at any time. Herding filters collect dust where it originates. As the graphic shows, there are various points along the quarrying and stone working process chain where dust is produced and needs to be filtered. Herding sintered plate filters meet the various dust collection requirements to optimal effect.



- ▶ Filter efficiency is always high because there is never any change of pore size, even during jet-pulse cleaning (BIA Certificate No. 9202090 / 6210 and No. 9202091 / 6210).
- ▶ The cleaned and dust-free air can be returned to the work room.
- ▶ Just one or two screws are needed to fasten the compact filter bags, hence fast assembly.
- ▶ The filter medium can be recycled, thus reducing the strain on the environment.
- ▶ HSL sintered plate filters achieve higher levels of separating efficiency than those currently required by the legislator. With regulations certain to become more stringent, Herding filter systems are a safe investment for the future.



LARGE-HOLE BORING MACHINES

The Herding filter system is installed directly on the boring machine to enable the dust to be collected straight from the bore hole. Power can be provided by a hydraulic, electric or pneumatic drive with injector. The type of filter system depends on the rate of flushing air supply.



MANUAL STONE WORKING

Herding can supply mobile dust collecting systems with fully automatic filter regeneration for transportable boring machines. Compressed air is saved because the filter system is only in operation when boring is actually underway and switches off automatically when boring stops.

STATIONARY STONE SPLITTING MACHINES

Special Herding dust collecting elements can be used to pick up dust from one or more workplaces and convey it straight to the filter. The German Quarrying Association has tested Herding filters and issued them with the GS stamp for tested safety.



MECHANICAL SYSTEMS FOR THE PRODUCTION OF BALLAST AND GRIT

In these complete plants, when you buy filter systems dust mainly arises at the from Herding you get everything following points: ► at the crusher inlet from one source. We create and outlet, ► at the screens, individual and tailor-made solutions. ► at the conveyor transfer points, From the project planning of ► at the silo and loading stations. pipeline systems (if required) to the filter itself. Everything turn-key to filter air in your plant, of course.