

# Application Presentation Paper

## FUNDABAC® Filter for Flue Gas scrubbing

### Background

Environmental regulations are setting ever stricter limitations on emissions coming from waste incineration plants.

Recently, also heavy-load engines (e.g. marine diesel engines) are being asked to meet increasingly stringent emission requirements. This can be achieved by burning a cleaner but more expensive fuel or by installing a gas treatment system onboard.

It has been shown that in many cases the wet flue gas cleaning system gives the best results in treating the contaminated gases: in a recycle loop, water is sprayed on the gases in a scrubber to absorb the pollutants, such as particulate matter and SO<sub>2</sub>. These substances are trapped in the water and have to be removed in a subsequent filtration step.

### Benefits of FUNDABAC®

Filter presses have, for a certain time, been the equipment of choice (at least for static installations), but due to stricter requirements for worker and environmental safety as well as operating cost reduction programs in municipal waste incineration plants, the filter press has been put under pressure due to its open design and manual involvement in the cake discharge step. For moving installations (marine engines) space is a constraint and filter presses are penalised by the large requested footprint.

FUNDABAC® filters are particularly well suited for this application thanks to the following features:

- Completely closed operation.
- Fully automatic process with no needed operator interference.
- According the specific needs, dry discharge of the solids for minimising waste and handling costs or slurry discharge for a pump-able, easy-to-transfer waste.



FUNDABAC® filters have been proven to be the ideal equipment to match the demands of such an application.

Furthermore, the use of dynamic filter cloths renders the need for moving or rotating parts completely unnecessary. As a result, capital investment and spare parts costs are reduced considerably.

As a matter of fact, only the filtration media, which is made of synthetic fibres has to be replaced after 6 to 18 months of operation, depending on type and use.

Please contact DrM for specific information.