

# Filtration Group application example – Chemical Industry

## Backflush filter R8-10 for the manufacture of plant protection products



Factory Equipment

### Initial situation

In the chemical industry the highest requirements for process quality, purity, safety, and environmental protection are in place, and therefore also for our clients who are committed to global food security with an emphasis on innovative cultural solutions, seeds, and crop protection. In the production of pesticides, methyl-phosphonic acid n-butyl ester (MPE) is produced during one step, which is a required precursor for the herbicide glufosinate-ammonium. The herbicide is used to fight weeds and root suckers. Process-specific provisions from clients require a high level of customization of the pressure housing. Consideration of work standards, as well as build support and in-house approval of the filter, guarantee Filtration Group's responsibility. Modification of the filter elements is the distinguishing feature of the 2-model system as compared to other products. The components of the filter element must be adjusted without changes to the basic dimensions.

### Solution statement

- Fully automatic backflush filter with R8-10 flushing by using its own medium
- Adjustment of the existing filter solutions to the specific circumstances of the client's processing
- Modification of the filter elements with special fabric
- Use of a tangential clamping element to reduce the radial distances within the filter elements
- Use of a mechanical seal for the shaft opening
- Through the use of the tangential clamping device, the particularities of the process can be addressed while retaining the standard parts



### Customer value

- Reduction of the residual particulate load from the process
- Significantly lessened damage to the pumps reduces the need for replacement
- Process security by means of specifically customized filter elements
- Use of tried and tested, robust backflush technology
- High operational security from using a mechanical seal for the thermosiphon system

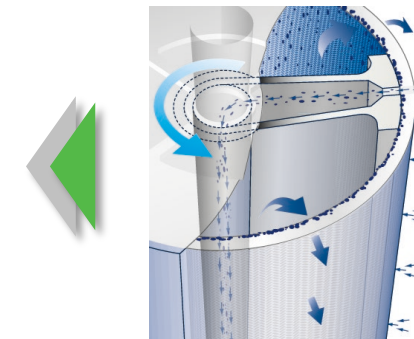


### Challenge

The backflush filter supplied by Filtration Group are used as pump protection filters. Pumps, which are used most of all for the transport of fluid media, must be protected from damages caused by solid particles. In this project particles result from the quenching of an organophosphorous liquid. The slurry of the quench condensation column is sent through a canned motor pump into a cooler and subsequently fed to the quench once it is cooled. Coarse particles from the condensation column disrupt the subsequent processes and diminish the service life of the canned motor pump.

#### Technical data

- 2 x R8-10 backflush filter
- DN 250 / size F09
- Material: Stainless steel 1.4571
- Specific process data is agreed to be confidential



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