

CLEANING INSTRUCTIONS

Cleaning of SINBRAN® Filter Elements

Easy and gentle cleaning

An advantage of the SINBRAN® Filter Elements is its easy cleaning ability.

Due to the special design of the SINBRAN® filter element its ePTFE Membrane stops powder product (dust) from entering into the filter element. The separated dust stays on the membrane surface which then gets cleaned off by compressed air from the inside out.

In case of a product change or a blockage of the surface it is also possible to wet clean the filter elements and regain previous performance filtration levels.

The wet cleaning process can be performed when the filter elements are assembled (cleaning in place system – CIP) or disassembled from the filter housing.

Wet cleaning when assembled (CIP)

CIP (cleaning in place) fitted filtration systems have an integrated cleaning system. It's important that the pressure from the spray nozzle is not too high.

After cleaning the drying process can be speeded up by blowing clean warm air at 50 % of the normal flowrate through the filter elements.

Important: No air pressure pulses should be used during the drying process.

Approximately one hour after the drying process has begun the filter elements should be dry. The permeability of the filter should be sufficient enough and the filter can be reused.

Wet cleaning when disassembled

Only clean the SINBRAN® Filter Elements from the external membrane side. Do not attempt to clean from the inside out, as this may damage the filter element.

› **Pressure washer:** This is a simple and effective way to clean the elements. It is important the water is sprayed at a distance of greater than 40 cm and the water stream hits the elements at an angle of roughly 15 – 20°.

Important: The water stream has to be as far away as possible, otherwise it may damage the membrane surface of the filter element.

› **Hose pipe:** The dust can be rinsed off by using a low pressure method such as a hose pipe. In addition a soft sponge or a very soft brush can be used to aid the process.

Caution: DO NOT USE ANY ABRASIVE OR SCRUB TOO HARD- Surface damage!!

Dry cleaning when disassembled

For hygroscopic powders the surface can be cleaned by using a soft brush, a dry cloth or a soft dry sponge to remove the powder from the membrane surface.

Important

For the wet cleaning process the temperature of the cleaning solution (water or a mild solvent) should not get above 70 °C.

Left over powder or crusts should be left on the surface, manual removal may cause surface damage to the membrane.

During the wet or dry cleaning process the element seal must be kept clean and checked for damage. If any damage is visible or you are unsure replace the seal.

Remember that bottom load fitted elements are fitted with a distance spacer!

Advantages:

- › **Quick Cleaning:** The smooth surface of the ePTFE membrane prevents dirt and product settlement.
- › **Easy flushing:** The ePTFE membrane is hydrophobic and aids the wet cleaning process.
- › **Wet and dry cleaning:** Hygroscopic product can be removed in a dry state.
- › **Entire regeneration:** After cleaning, the filter elements operate at almost the same filtration performance levels and differential pressure than a new filter element.

