

Regeneration Instructions for Filter Cartridges

BECO MEMBRAN PSplus

1 A 4.3.5.1 · EB
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Regeneration

As a basic rule, the BECO MEMBRAN PSplus should be regenerated at a differential pressure of < 0.5 bar and in all cases after each filtration:

▶ Empty the cartridge housing.

▶ Cold water rinsing:

Rinse with cold water **in filtration direction** for at least 2 minutes. **The throughput** should be set to **1 - 1.5 times** the value for the **preceding filtration**, if possible. The counterpressure should be set to 0.5 bar.

▶ Empty the cartridge housing.

▶ Hot water rinsing:

Rinse with hot water (80 °C) **in filtration direction** for at least 5 minutes in channel. Here too, the throughput should be set to **1 - 1.5 times** the value for the **preceding filtration**.

Then operate the system in circulation mode for 10 – 15 minutes. The counterpressure should be set to 0.5 bar.

Leave hot water in the housing over night. Next morning rinse again the filter shortly with hot and cold water.

Note

The best regeneration success is achieved if the filter cartridges are **left over night in hot water** after rinsing.

The rinsing water must be free from rust, lime or other contamination.

BEGEROW recommends that the rinsing water should be filtered. The filter fineness should be based on the filter to be rinsed.

If the filter cartridges are sterilized with steam, the steam should also be filtered. Sintered stainless steel filter cartridges with a retention rating of 10 µm are suitable for this purpose.

Special cleaning procedure if rinsing with hot water is no longer sufficient (Diff. Pressure > 0.5 bar)

The special cleaning procedure should be used in the following cases:

- ▶ The filter cartridges can no longer be regenerated with cold and hot water.
- ▶ Products that are difficult to filter have placed a heavy strain on the filter cartridges
- ▶ Increased differential pressure during rinsing of the filter cartridges

We are unable to offer a guarantee for the success of the special cleaning procedure or for any damage to the filter cartridges!

Special cleaning procedure with caustic soda (NaOH) and hydrogen peroxide (H₂O₂)

1. Rinse BECO MEMBRAN PS in the direction of the flow (Important!). Install pump, hoses and dosing tanks such that recirculation is ensured.
2. First rinse the filter cartridges with cold water and subsequently with warm water (50 °C), like for normal rinsing.
3. This is followed by a caustic rinse with 1 % NaOH at a temperature of 50 °C.
4. In cases with strong contamination, we recommend discarding the first few liters that are discharged from the filter housing during the caustic rinse, since they usually contain a large amount of impurities. Continue the cleaning process in circulation mode for about 5 – 10 minutes at an intake pressure of approx. 1.0 bar.
5. Then carefully add 0.5% H₂O₂ and continue to circulate for a further 30 minutes.
6. After the cleaning process rinse with cold water until no more caustic solution is present (**test using a ph strip**).
7. For neutralization, circulate 0.5 – 1 % citric acid solution for 5 minutes at approx. 30 °C.
8. Then rinse again with water until the pH is neutral.

Please do not hesitate to contact us if you have further questions. Please call either your area sales manager or the BEGEROW application technology department direct on Tel. +49 6704 204-0.

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