

Depth Filtration

BECODISC BA – Stacked Disc Cartridge Range

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For the Filtration of Cognac, Whisky, Brandy, and other high Quality Spirits

BECODISC BA stacked disc cartridges are used for the demanding filtration of high quality spirits such as cognac, armagnac, barrel-matured brandy and whisky. The product range is graded from coarse particle separation to fine filtration and enables accurate adaptation to the requirements of spirit filtration.

The specific advantages of BECODISC BA stacked disc cartridges:

- ▶ Low content of calcium, magnesium and iron ions to avoid secondary hazes
- ▶ Colour-preserving filtration through minimum colour adsorption in the depth filter sheet
- ▶ Selective separation of long-chain fatty acid esters
- ▶ Reliable retention of the components to be separated through ideal pore structure
- ▶ High clarification effect through the use of high-quality raw materials
- ▶ Economic service life through high dirt holding capacity
- ▶ Comprehensive quality assurance for all raw and auxiliary materials and intense in-process controls ensure consistent quality of the finished products

Fine filtration of very fine haze substances

BECODISC BA 20

BECODISC stacked disc cartridges for achieving a high clarifying level. This stacked disc cartridge type reliably retains very fine particles, higher fatty acids and fusel oils. This makes them particularly suitable for haze-free storage and filling.

Clarification filtration

BECODISC BA 40

BECODISC stacked disc cartridges for clarification filtration and for the separation of medium-strong haze. This stacked disc cartridge type has a high dirt holding capacity and is particularly suitable for the filtration of spirits with a high fusel oil content.

Coarse filtration

BECODISC BA 80

BECODISC stacked disc cartridges for pre-filtration of spirits. This stacked disc cartridge type is particularly suitable for the first filtration after cool storage and for the separation of coarse particles.

Physical data

Selection Guidelines

BECODISC type	Depth filter sheets used	Nominale retention rate µm	Thickness mm (in)	Ash content %	Bursting strength wet KPa (psi)	Water permeability at Δ p = 100 kPa l m ⁻² min ⁻¹
BA 20	SFI FCT A 20	0.8	4.4 (0.17)	43	> 40 (5.8)	160
BA 40	SFI FCT A 40	2.5	4.4 (0.17)	43	> 40 (5.8)	210
BA 80	SFI FCT A 80	27.0	2.9 (0.11)	< 1	> 110 (15.95)	10120

Components

The depth filter sheets of the BECODISC BA stacked disc cartridges are made from extremely pure materials. They contain varying quantities of finely fibrillated cellulose fibres of hardwood and softwood, cationic resin and high quality, and very pure kieselguhr.

Recommendations for Avoiding Damage

BECODISC® stacked disc cartridges can only be used in the specified flow direction. This applies to product filtering as well as sanitizing with hot water, and sterilizing with the stacked disc cartridges with saturated steam. In order to avoid damage to the filter cells, the system should be protected with a suitable non-return valve.

Refer to our insert included with each BECODISC carton for detailed application information.

Intermediate Plates

If more than two BECODISC stacked disc cartridges (12" or 16") with dual O-ring adapters are stacked in the housing, a central spindle should be installed for safety reasons. In the event, more than one 16" BECODISC stacked disc cartridge (flat adapter / dual O-ring adapter) is used in the housing, we recommend the installation of stainless steel intermediate plates between the BECODISC® stacked disc cartridges.

Sanitizing and Sterilizing (optional)

Sterilizing with hot water

The hot water temperature should be 85 °C (185 °F) to 95 °C (203 °F). A differential pressure of 150 kPa (1.5 bars) must not be exceeded when sterilizing with hot water.

Sterilization time: At least 30 minutes once a temperature of at least 80 °C has been reached at all filter openings. In the interest of energy conservation, the water may be circulated provided the specified temperatures are maintained.

Sterilizing with steam

The wetted BECODISC stacked disc cartridges can be sterilized with saturated steam up to a maximum temperature of **121 °C (250 °F)** as follows:

- Steam quality: The steam must be free of foreign particles and impurities.
- Temperature: Max. **121 °C (250 °F) (saturated steam)**
- Duration: Approx. 20 minutes after steam exits from all filter valves.
- Rinsing: After sterilizing with 50 l/m² at 1.25 times the flow rate.

Filter Preparation and Filtration

Unless already completed after sterilization, we recommend pre-rinsing the closed filter with 50 liters (13.2 gal) of water per square meter at 1.25 times the flow rate prior to the first filtration. Depending on the application, this usually equals a rinsing time of 10 - 20 minutes. Test the entire filter for leakage at maximum operating pressure.

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High-proof alcohol solutions and products that do not allow pre-rinsing with water should be circulated for 10 to 20 minutes. Dispose of the rinsing solution after rinsing.

Waste Disposal

Due to their composition, BECODISC stacked disc cartridges can be disposed of as harmless waste. Comply with relevant current regulations depending on the filtered product.

Storage

BECODISC stacked disc cartridges must be stored in a dry, odor-free, and well ventilated place.

BECODISC stacked disc cartridges are intended for immediate use and should be used up within 36 months of delivery.

BECODISC stacked disc cartridges must not be exposed to direct sunlight.

Available Formats

BECODISC stacked disc cartridges are available with 12-inch (295 mm) and 16-inch (402 mm) diameters. Further information about filter areas and gasket types can be found in our current BECODISC folder.

HS customs tariff number: 4812 00 00

Quality Assurance according to DIN EN ISO 9001

The comprehensive Quality-Management-System of BEGEROW has been certified according to DIN EN ISO 9001.

The certification confirms the functioning of the total system of Quality Assurance from product development through contract controls, choice of suppliers as well as acceptance controls, production and final examination all in the way to storage and dispatch.

Extensive quality assurance measures comprise the adherence to technical criteria regarding the function as well as the confirmation of chemical purity and quality recognized as safe under the German law governing the production of foodstuffs and beverages.

BECO depth filter sheets are listed in the US-FDA under DMF No. 15690 and BB-MF No. 4797. They fulfill the requirements of the FDA standard CFR, Part 177.2260 g, h, j, k, l. Vol. 21, Chapter 1 as well as the requirements of BfR recommendation XXXVI.