



Catalyst Thickener Filter Disc

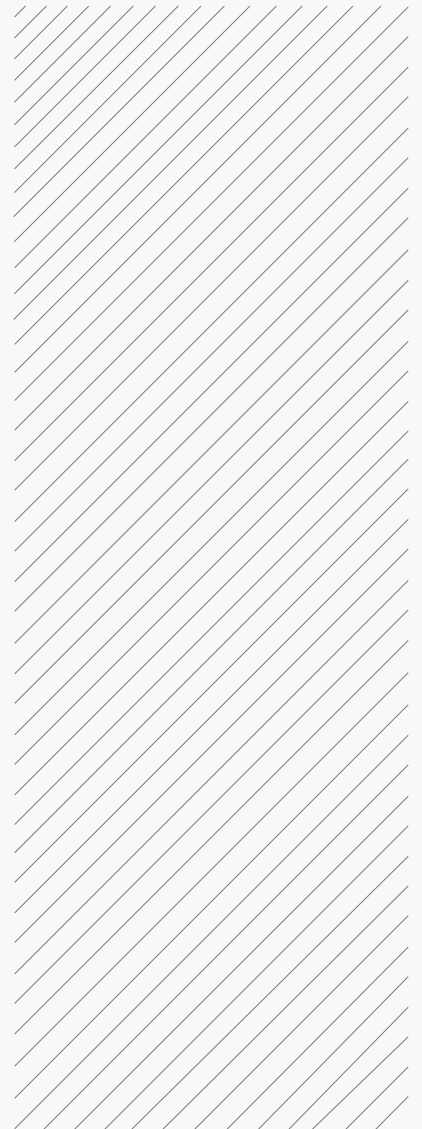
Weave Impossible to Possible



BOEDON Industech Limited

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BOEDON Brochure





We offer **catalyst thickener filter** discs in a variety of filter ratings and sizes to maximize the catalyst recovery and meet your **various filtration** demands.

Catalyst thickener filter disc takes the sintered mesh constructed from multiple layers of stainless steel (304, 316, 316L) woven mesh after special laminate pressing and vacuum sintering as the main filter layer.

It is installed in the catalyst thickener and is used to purify chemicals and recover catalyst during the production process of aniline, TDI, MDI, BDO and other chemicals.

Catalyst Thickener Filter Disc

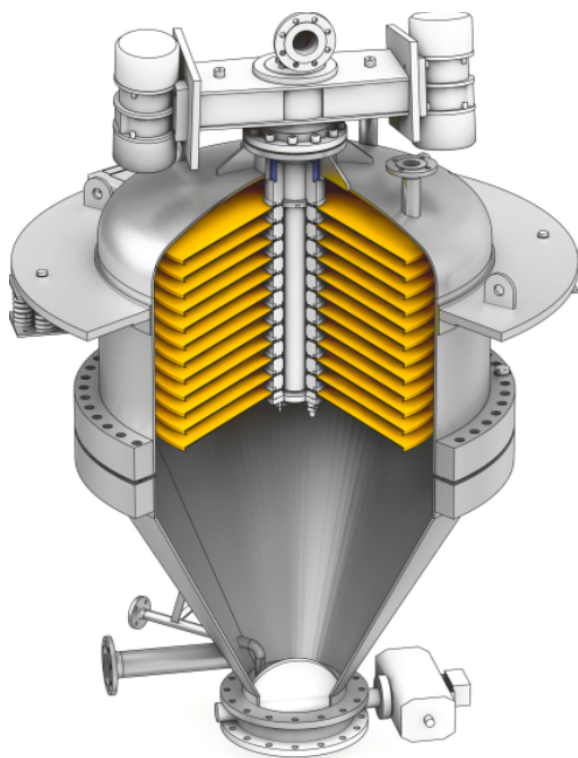


CATALYST THICKENER FILTER DISC

Working Principle

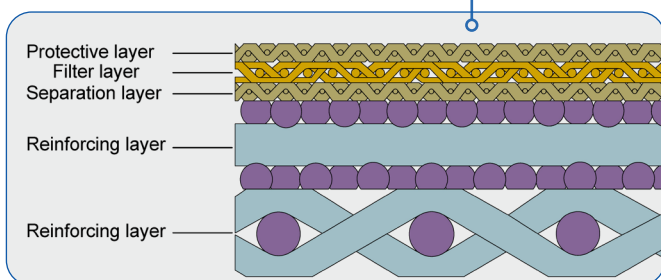
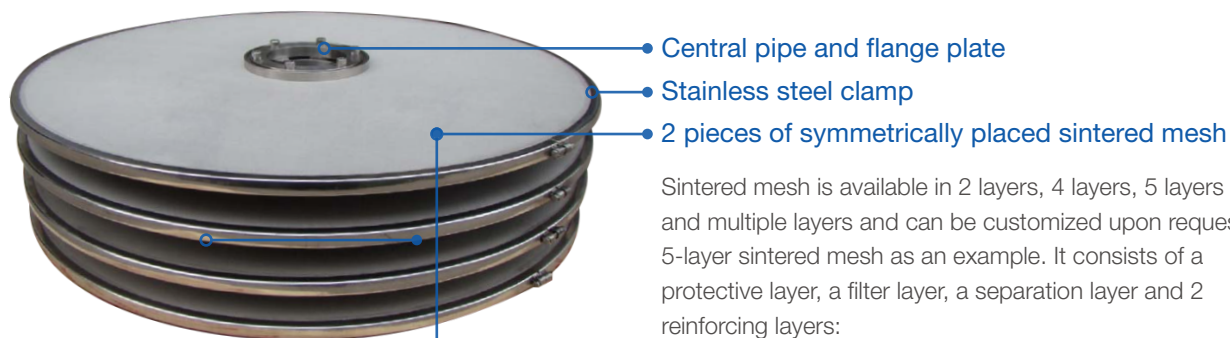
First, the suspension of aniline and other chemical products and solid catalyst particles is injected into the catalyst thickener. The solution flows through the high precision filter disc and into the center pipe, and then flows out of the filter. The separated catalyst returns to the agitated reactor and continues to take part in the reaction. Its filtration mechanism is a new form of filtration similar to cross-flow filtration and filter cake filtration.

When the differential pressure of the filter disc is too high and affects the filtration efficiency, the washing liquid can be pressurized to the washing nozzle in the middle of the filter disc through the water flushing system to wash the filter disc. In this way, the purpose of cleaning the filter disc is achieved without disassembling the equipment, thus extending the service cycle of the filter disc.



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Structure



- Central pipe and flange plate
- Stainless steel clamp
- 2 pieces of symmetrically placed sintered mesh

Sintered mesh is available in 2 layers, 4 layers, 5 layers and multiple layers and can be customized upon request. 5-layer sintered mesh as an example. It consists of a protective layer, a filter layer, a separation layer and 2 reinforcing layers:

- Protective layer. It is a metal woven mesh used to maintain the pore size and dimension stability of the sintered mesh.
- Filter layer. It is a fine mesh used to control the filter rating of the sintered mesh.
- Separation layer. It is a metal woven mesh used to guide the direction of clean liquid.
- Reinforcing layer. It is a metal woven mesh used to enhance the overall strength and rigidity of sintered mesh.

CATALYST THICKENER FILTER DISC

Specification

Material:

- Standard material: stainless steel 304, 316, 316L;
- Special material: Hastelloy, Monel, Inconel, etc.

Nominal filter rating: 1–200 μm

Max. operating temperature: 480 °C

Catalyst content at outlet: 0.001%

990 mm installation size, and can perfectly replace PALL thickener filter discs.

CATALYST THICKENER FILTER DISC

Features & Application

Features

- **High filtration precision.**
Uniform pore distribution, precise filter rating.
- **High temperature resistance.**
Adapt to 480 °C high temperature environments.
- **High filtration efficiency.**
Double-side filtration, increased filter area.
- **High strength.**
Multiple sintered mesh structure offers great compression resistance and mechanical strength.
- **Easy cleaning.**
It is provided with a washing pipe and can be cleaned without disassembling the equipment.
- **High flow rate.**
The special sintering process makes it have a high flow rate and a high production efficiency.

Application



Chemical

- Aniline material production
- BDO material production
- TDI material production



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