

Benchtop Jacketed Nutsche Filter

GOEL- A Borosil Company



Operating
temperature
-60 °C to +200 °C

ΔT - Thermal
shock resistance
60 °C (double
wall)

The **GOEL- A BOROSIL Benchtop Nutsche Filter** is an all-glass filtration device designed for solid-liquid separation applications. Here are some key features and benefits of this filtration system:

- 1. Pressurized Filtration:** The filter can handle pressures of up to 2 bar (2 bar gauge pressure), which is beneficial for accelerating the filtration process. This pressure helps in reducing solvent evaporation, especially at elevated temperatures, making it efficient for separating solids from liquids.
- 2. Controlled Agitation:** The filter is equipped with a flat blade that allows for Agitation. This feature enables gentle mixing of the slurry, dissolution of solids, smoothing of the filter cake. Agitation gives the operator control over the filtration process.
- 3. High Containment:** The Benchtop Nutsche Filter is designed to provide a high degree of containment. This is crucial for processes involving hazardous or sensitive materials where operator safety and product integrity are paramount. The containment feature helps prevent cross-contamination and minimizes product loss.
- 4. Process Visibility:** The filter's all-glass design offers excellent visibility into the filtration process. This transparency allows operators to monitor the progress of solid-liquid separation, ensuring that the desired results are achieved.
- 5. Optimal Filtration and Drying:** The full jacket design allows for precise temperature regulation, optimizing the filtration and drying process. This ensures efficient separation of solids and liquids, leading to high-quality, dry filter cake.

Vessel capacity	Size 100DN - 1 Ltr and 2 Ltr
	Size 150DN - 3 Ltr and 5 Ltr with "X" strong type Bottom.
Vessel type	Single wall or Double wall (full jacket)
Filtration area	Approx 76.5 cm ² (1 L & 2 L)
	Approx. 175.7 cm ² (3 L & 5 L)
Operating pressure	Full vacuum to +2 barG (+0.2 MPa)
Operating jacket pressure	Up to +0.5 barG (+0.05 MPa)
Operating temperature	(-60 °c to +200°q
ΔT - Thermal shock resistance	110 °c (Double wall)

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Comprehensive Design: The GOEL- A BOROSIL Benchtop Nutsche Filter is designed to handle various stages of the solid-liquid separation process. It provides a solution for filtration, mixing, dissolution, cake smoothing, and powder formation all in one unit. This versatility can streamline processes and save time in laboratory or industrial applications.

Efficiency and Time Savings: The ability to apply pressures of up to 2 barG and controlled Agitation for slurry mixing accelerates the filtration process. This efficiency can lead to shorter processing times, increased productivity, and reduced solvent evaporation, saving both time and resources.

Wide Range of Vessel Capacity: The availability of vessel capacities ranging from 1 L to 5 L makes it suitable for various scales of operation, from laboratory work to small-scale production.

Thermal Shock Resistance: The double-wall design with a thermal shock resistance of 110 °C adds durability and reliability to the equipment, making it suitable for demanding and dynamic processes.



Material Safety: The filter is engineered with material safety in mind. Its high containment capabilities help prevent exposure to hazardous or sensitive materials during processing. This feature is particularly crucial when dealing with toxic substances, ensuring the safety of operators and the integrity of the product.

Cross-Contamination Prevention: The filter's design minimizes the risk of cross-contamination between different materials or batches. This is essential in industries where product purity and consistency are paramount, such as pharmaceuticals and chemical manufacturing.

Operating Flexibility: With the capability to operate under a wide range of temperatures (-60 °C to +200 °C) and pressure conditions (full vacuum to +2 barG), the GOEL- A BOROSIL Benchtop Nutsche Filter offers flexibility to accommodate diverse applications and process requirements.

Process Visibility: The all-glass design of the filter allows operators to visually monitor the separation process in real-time. This transparency ensures that the desired results are achieved and helps troubleshoot any issues that may arise during the process.