

The Centerdisc® CDP disc filter is primarily designed for fiber recovery from white water and thickening of small flows. The Centerdisc CDP is insensitive to flow and feed consistency variations and suits most pulp and paper grades.

Key Benefits

- Ability to handle high freeness applications
- Ability to handle high feed consistencies
- Low installation costs
- User-friendly operation
- Open grid segments

Ability to Handle High Freeness and High Consistency Applications

The Centerdisc CDP filter is able to handle high freeness and high consistencies making the process equipment smaller and flexible to variation.

The Centerdisc CDP filter's ability to handle high freeness and high consistency applications is derived from the unique open rotor design. Segments are mounted on cross channels in the periphery and a central discharge trough. The design allows the thick, high freeness pulp fiber mat to fall directly down through the open passage between the segments into the discharge vat.

The agitating effect of the cross channels makes the Centerdisc CDP filter ideal for high freeness pulp as the mixture will not sediment. In addition the Centerdisc CDP filter produces consistent quality pulp in an efficient process with variations in input. Other benefits derived from the open rotor design are high capacity, minimum space requirements, low maintenance costs and operational reliability.

Low Installation Cost

The Centerdisc CDP is fully assembled from the workshop which saves time, reduces costs and improves the quality of installation.



Simple Operation and Maintenance

The Centerdisc CDP filter is designed with both the operator and the mechanic in mind. Filter segments bearings are easily accessible from outside the filter. Standard components are used for drives and bearings.

Easy Cleaning of Segment

The open grid segment design with over 90% open area, eliminates the risk of pulp and debris accumulating inside the sector. This design allows the fabric to be cleaned from both the outside and inside by a spray water jet passing through the open sector. This keeps the cloth clean longer which improves effectiveness.



Fig. 2 The fiber mat falls directly through the open passage between the segments into the discharge trough.

Working Principle

The pulp mat starts to form under gravity, ensuring optimal dewatering characteristics. The filtrate is drained via the open-grid sectors to the corresponding spiral shaped outer channels. Clear and super clear filtrate is formed under negative pressure. The flow enters the filter via the headbox and is uniformly distributed.

The outer longitudinal channels are connected to a spider, formed by radial inclined channels. The spider is connected to a suction box with a valve for setting the split between cloudy and clear filtrate.

When the sectors emerge from the suspension they are drained and the pulp mat is dewatered under negative pressure.

The fiber mat is knocked-off at the top and falls directly into the trough.

The pulp discharge trough is centrally located in the wide inner space of the open rotor.

The filter cloth is cleaned by an oscillating nozzle before the filtration procedure starts over again.

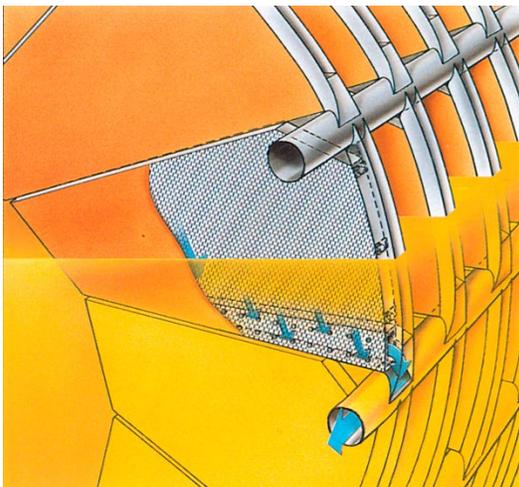


Fig. 3 The filtrate is drained to the spiral shaped outer channels

The outer channel concept provides a continuous agitation in the vat, resulting in a uniform stock consistency.

The inclined channel design prevents the forming of air pockets when the segments submerge, thus allowing better mat formation and unrestricted filtrate flow.

Dimensions

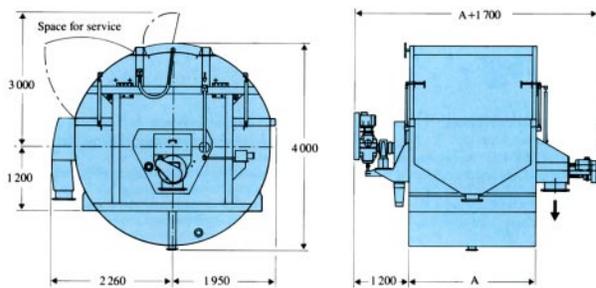


Fig. 4 Dimensions in mm

Size	Max flow l/min	A mm	Net weight (x1000kg)	Oper. weight (x1000kg)
L1	9000	4300	8.7	38.2
L2	13000	4900	9.3	43.4
L3	18000			

Material

All wetted parts are made of high grade stainless steel. Filter cloth of Polypropylene is standard, Kynar and stainless steel is an option.

Available Auxiliary Equipment

- Foundation
- Platform
- Instrumentation