Enclosed Filtration System BECO INTEGRA® LAB 220 S

Large Cake Frame Chamber

BECO INTEGRA LAB 220 S was developed especially for processing small quantities in laboratories and in technical colleges as well as for the production of small batches and for upscaling in the beverage and food industries, for bioengineering, pharmaceuticals as well as the chemical and cosmetic industries.

The enclosed filtration system's special design of two round, vertical filter elements on the left and right sides of the filter frame, makes it possible to transfer the test results directly from the laboratory or research center to process equipment such as the BECO INTEGRA PLATE enclosed plate and frame filter.

Function Principle

The BECO INTEGRA LAB 220 S uses depth filtration sheets to remove undesirable suspended solids, sediments or microorganisms from the liquid/suspension. For this purpose, the liquid is fed into a cake frame. The pressure difference between the in- and outflow causes the liquid to flow through the depth filter sheet. As a result, depending upon application, it emerges either clarified or sterilized. The filtrate discharges through the outflow, collects in the drainage grooves and flows to the filtrate outlet.

An O-ring located behind the sheet frame reliably prevents any emissions from the filtered product from reaching the surrounding environment, even in difficult filtration applications.

By using two different depth filter sheets, for example coarse and fine filtration, the system combines multiple steps such as pre-filtration and sterilizing filtration into one filtration step.

Technical Data

Max. permissible operating pressure:	58 psi (400 kPa/4 bar)
Max. permissible differential pressure:	43.5 psi (300 kPa/3 bar)
Max. permissible operating temperature:	284 °F (140 °C)



Filter	
Depth filter sheet size:	Ø 8.74" (222 mm)
Filter surface:	0.33 ft² (310 cm²)/ depth filter sheet
Weight:	30,86 lbs (14 kg)
Number of depth filter sheets	
Single stage filtration:	1 or 2 sheets
Two stage filtrations:	1 x 2 or 2 x 2 sheets
Cake frame width:	1.58" (40 mm)
Max. cake volume:	0.33 gal (1.25 l)



Description	Article no.
BECO INTEGRA LAB 220 S	59262106
Lever for round filter	P7800105
Star knob 50 x M10 (knurled nut)	P7800101

Description	EPDM	Silicone	Viton	FEP coated
O-ring round filter BECO INTEGRA LAB 220	59262117	P7800302	59262118	P7800304

Materials

Product contacting parts:	Stainless steel AISI 316L/AISI 316Ti
Others:	Stainless steel AISI 304
Gaskets, O-rings:	EPDM, Silicone, Viton, FEP coated

Connections

Inlet/outlet:	Hose nozzle for hose inside Ø 0.51" (13 mm)
Ventilation:	Air relief cock and manometer 0 – 87 psi (0 – 600 kPa/0 – 6 bar)

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