

Gravity band filter Type SPB

RE 50401/09.09

1/4

Technical information

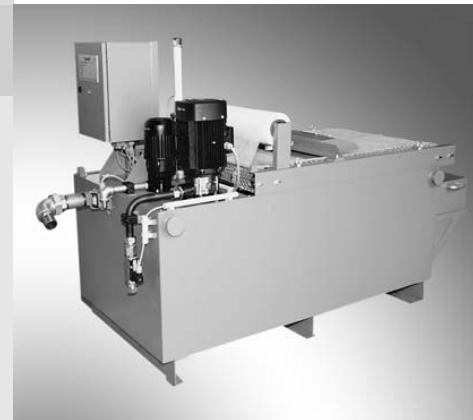


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Introduction

Page	Full-flow filtration of oils or emulsions containing swarf and metal particles with consumable fleece.
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2	The SPB is particularly used in case of high requirements on the filtration rating with an output of 50 - 1000 l/min.
2	
2	The structural components are optionally integratable, e.g. vertical and horizontal feed pump or dirt collecting box movable or suitable for transport by forklift truck.
3	
4	The volume of the clean tank is matched to the operating conditions.

Application

Filtration of emulsions, solutions, waters, oils up to 75 mm²/s during the machining of steel, cast iron, light and non-ferrous metals and plastics.

Special features

- Full-flow filtration
- Flat-bed filtration via fleece materials
- Universal for all fluids
- Clean tank, with volume set to suit operating conditions
- Feed pump horizontal or vertical
- Limit switches for "Fleece fault"
- Electrical control box
- Versions in standard or stainless steel (1.4301, 1.4571)
- Easy to service and maintain thanks to simple construction
- As modular system extendable to suit customer requirements

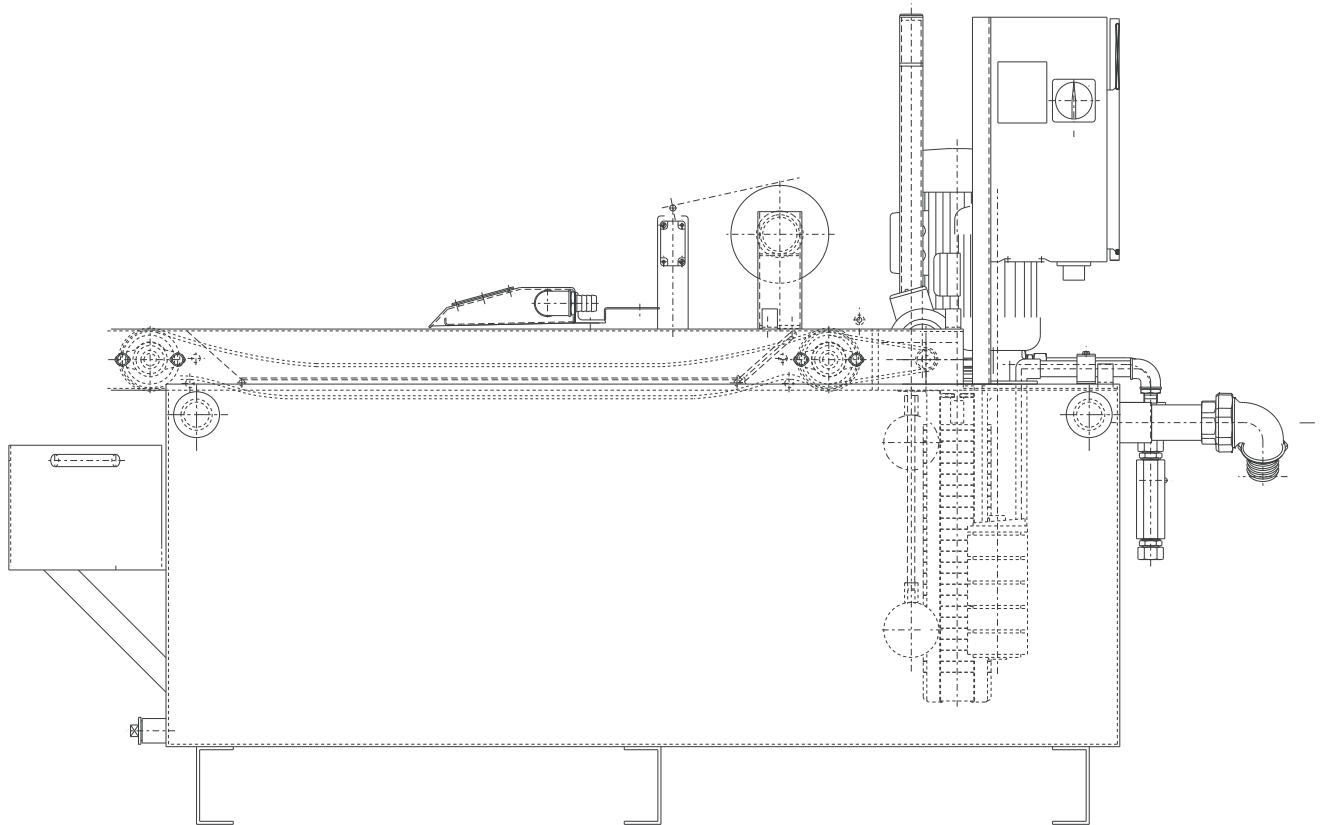
Standard construction

- Robust steel sheet design with struts and braces
- Deflector and drive roller in life-lubricated self-aligning ball bearings
- Drive station with geared motor (n = 1/min)
- Woven band SM - galvanized
- Glideways of profiled steel
- Level control system for band feed
- Inlet distributor
- Filter medium 30 g/m², 40 g/m², 50 g/m²

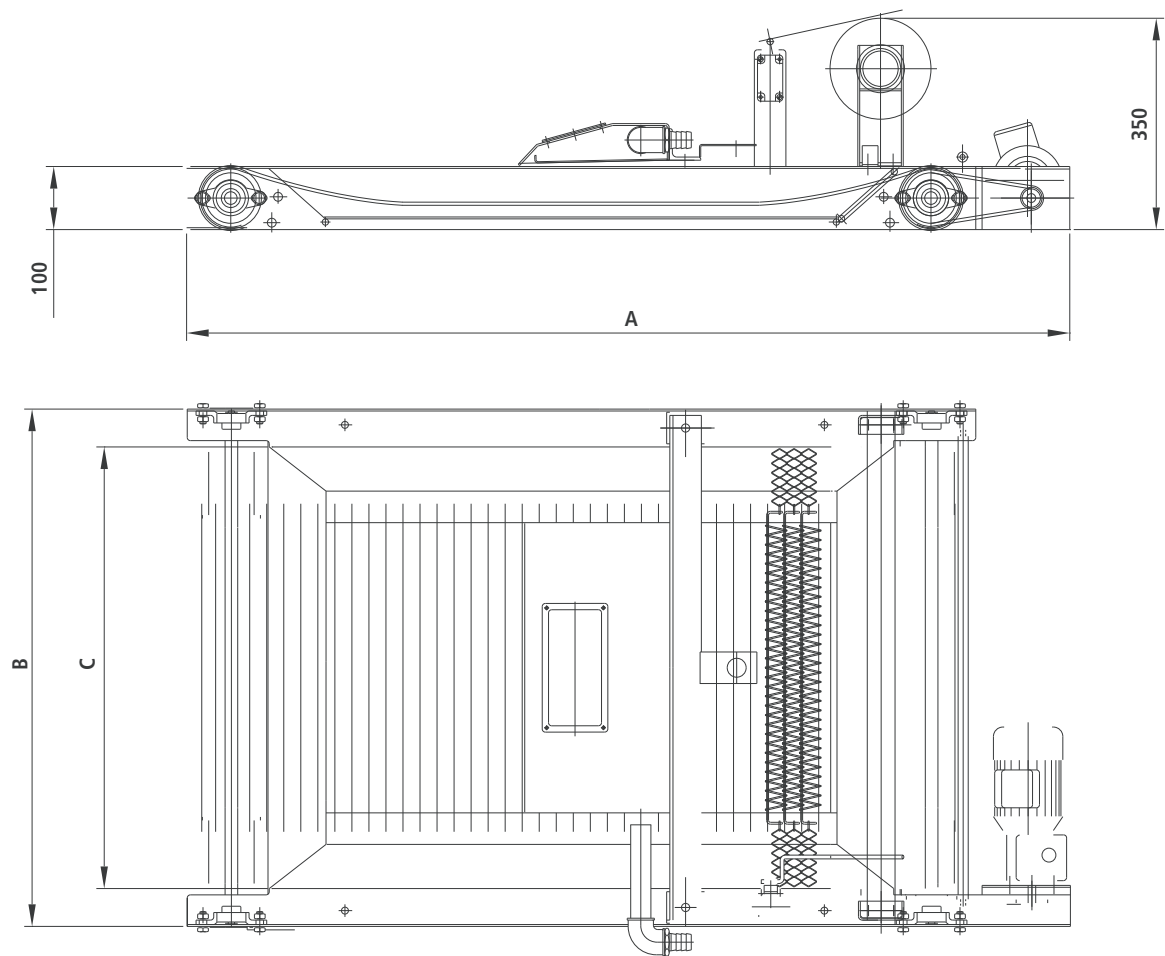
Function

The fluid to be filtered reaches the inlet distributor of the system. There, the liquid is settled and evenly distributed to the filter fleece retaining the impurities. Already after a short time, the impurities form a filter cake bringing about an additional fine filtration in the micro sector. With increasing thickness of the filter cake, the filtration rating of the system increases. At the same time, the through-flow resistance through the filter fleece is increased. This causes the fluid level to rise above the filter fleece.

If a preset (maximum) fluid level is reached, the fleece transport switch initiates regeneration. In this connection, the gear motor indexes and pulls in clean filter fleece until the fluid level sinks under the maximum fluid level again. This filtration allows for a very high coolant throughput whereas very little filter fleece is consumed, with good filtration performance. The purified liquid flows into the clean tank below the filter basin.



Unit dimensions (dimensions in mm)



Type SPB	SPB 2	SPB 3	SPB 4	SPB 5	SPB 6
A	1200	1400	1600	200	2150
B	620	820	1120	1120	1320
C	500	700	1000	1000	1200
Filter surface m ²	0.4	0.7	1.2	1.6	2.0
Flow rate (l/m)	70	140	210	280	350
Tank size m ³	According to customer request in 100 mm height stepping				

The flow rate refers to the rough grinding of steel when using emulsion. With other processing types and liquids, corrections are necessary. Dimensional and structural changes reserved.

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