

MAHLE

Industry

Horizontal pressure leaf filter Liquid sulphur filtration

1. Introduction

The MAHLE Industrial Filtration horizontal pressure leaf filter is a pressure filter with a large specific filtration area due to the shape of the filter elements. In the sulfur industry it is mainly used for filtration of liquid sulphur to remove ash and other (filterable) impurities.

We have been building these filters for more than 60 years. The design of the filter is state of the art. More than 10000 vertical and horizontal pressure leaf filters have been sold worldwide for various applications so far.

For liquid sulphur these filters have been sold for more than 40 years.



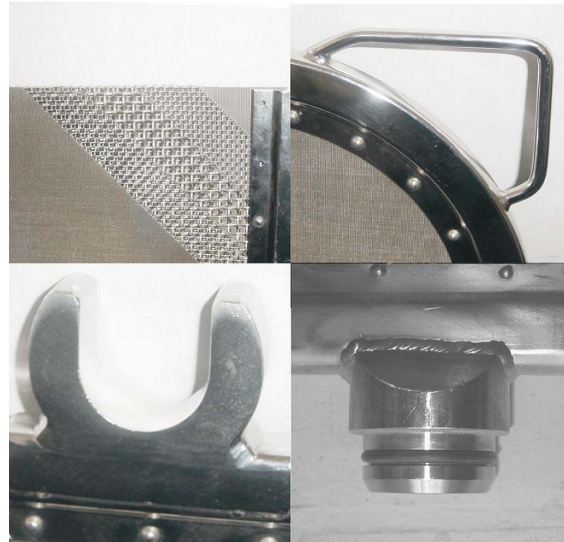
2. Pressure leaf system advantages

The pressure leaf filter is an enclosed filtration system and can be fully automated. This filter produces a high filtrate clarity after the clarification run and is also suitable for all kinds of filter aids. The regeneration time between the filtration cycles is short. Horizontal pressure leaf filters can also be delivered as tandem units to save floor space. The pressure leaf filter itself has no rotating parts, keeping maintenance to a minimum. These advantages result in an economical filtration solution.

The double sided filter leaves are made from stainless steel. The rigid filter leaves have five layers of stainless steel wire mesh. The horizontal pressure leaf filter for liquid sulfur filtration has a steam jacket. The leaf spacing is 125 mm, to allow for precoat and longer filtration times. The filter leaves are individually mounted on the central manifold, which allows the removal of any or all of the filter leaves easily and quickly. The filter cake can be dried with steam. For cake discharge the carriage with the filter leaves is moved outside the tank with an electric system. The bayonet ring is opened hydraulically. The cake discharge is easily done with the filter opened. The cover gasket is mounted in the cover ring. The tank ring is plated with stainless steel. The filter is equipped with a self closing quick release manifold coupling, which is steam heated.

3. Standard design data

Material tank	: carbon steel
Material filter elements	: stainless steel
Design pressure	: -1/6 bar(g)
Design pressure steam jacket	: -1/7 bar(g)
Design temperature	: 0/170 °C
Max. allowable pressure drop	: 4.5 bar
Design and approval	: PED 97/23/EC SELO 02257 (China) GOST-R others upon request



	36H	48H	60H	72H
Inlet	DN80/50	DN80/50	2xDN100/80	2xDN200/150
Outlet	DN80/50	DN80/50	DN100/80	DN250/200
Vent	DN80/50	DN80/50	DN80/50	DN125/80
Drain	DN80/50	DN125/100	2xDN150/100	2xDN150/100
Air/steam	DN80/50	DN80/50	DN80/50	DN80/DN50
Steam jacket	DN25	DN25	DN25	DN25

4. Specifications

Model	Filter Area [m ²]	Cake volume [dm ³]	Filter volume [dm ³]	Leaf spacing [mm]	Filter leaves [-]	Floor space [mm x mm]	Height [mm]
36H							
36H-60-S-5	5.6	225	1080	125	8	1500 x 3550	2150
36H-80S-5	7.6	305	1320	125	11	1500 x 4300	2150
36H-110-S-5	10.4	415	1630	125	15	1500 x 5300	2150
36H-140-S-5	13.2	530	1940	125	19	1500 x 6300	2150
48H							
48H-190-S-5	18	710	2850	125	13	2100 x 5800	2650
48H-265-S-5	25	985	3570	125	18	2100 x 7500	2650
48H-325-S-5	30	1205	4150	125	22	2100 x 8050	2650
48H-385-S-5	36	1425	4730	125	26	2100 x 9050	2650
60H							
60H-330-MS-5	31	1230	5300	125	15	2400 x 7200	3400
60H-440-MS-5	41	1640	6425	125	20	2400 x 8450	3400
60H-550-MS-5	51	2050	7550	125	25	2400 x 9700	3400
60H-660-MS-5	61	2450	8675	125	30	2400 x 10950	3400
60H-770-MS-5	72	2860	9800	125	35	2400 x 12200	3400
60H-880-MS-5	82	3270	10925	125	40	2400 x 13450	3400
72H							
72H-945-MS-5	88	3520	11750	125	27	3000 x 10250	4100
72H-1085-MS-5	101	4040	13050	125	31	3000 x 11250	4100
72H-1395-MS-5	130	5200	15970	125	40	3000 x 13250	4100
72H-1750-MS-5	163	6520	19220	125	50	3000 x 16000	4100

Other models upon request

Notes: Dimensions are for reference only. Subject to technical alteration without prior notice

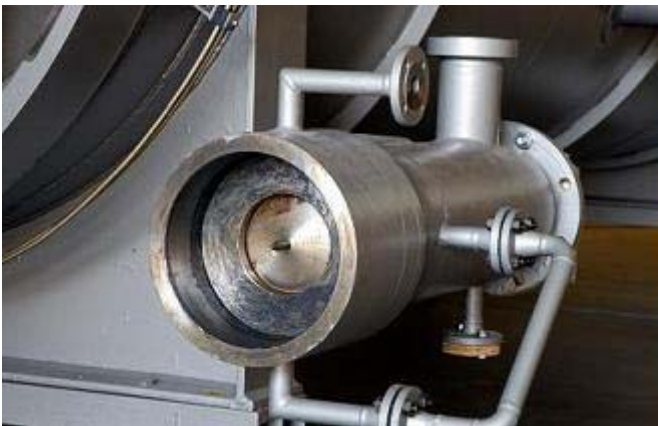
Please ask also for our polishing cartridge filters for liquid sulphur.



Filter elements



Automation



Manifold coupling



Vibrator (option)



Bayonet closing



Motor+motor reductor

MAHLE Industrial Filtration (Benelux) B.V.
P.O.Box 396 1800 AJ
Alkmaar - The Netherlands
Phone +31 (0) 72 5273400
Fax +31 (0) 72 5125207
industrialfiltration@nl.mahle.com
www.mahle-industrialfiltration.com
11/2011