

## Horizontal pressure leaf filter

**RBDCD**

For filtration of edible oil

### 1. Introduction

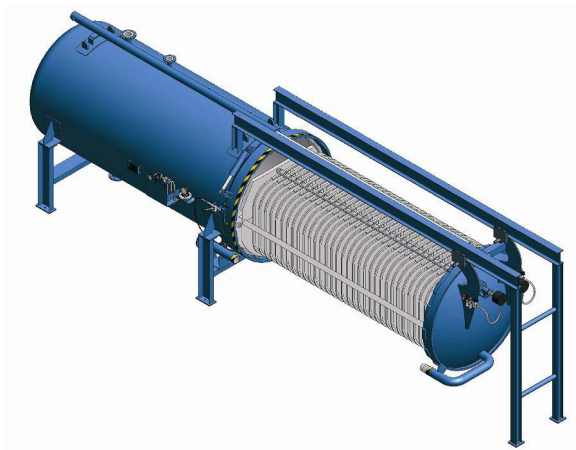
The MAHLE Industrial Filtration horizontal pressure leaf filter is a pressure filter with a large specific filtration area due to the shape of the filter elements. In the edible oil industry it is mainly used for filtration after winterisation, but sometimes also used for crude oil and bleaching earth filtration.

The double sided filter leaves are made from stainless steel. The rigid filter leaves have five layers of stainless steel wire screen. The top layer of screen depends on the application. 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 horizontal pressure leaf filter can be built in larger units than the vertical type.

The filter cake can be dried with compressed air, inert gas or steam. For cake discharge the carriage with the filter leaves is moved outside the filter tank with an electric / hydraulic system, which also operates the bayonet closure.

The cake is discharged by a pneumatic vibrator. As the filter is opened during discharge it is easy to monitor the cake discharge.

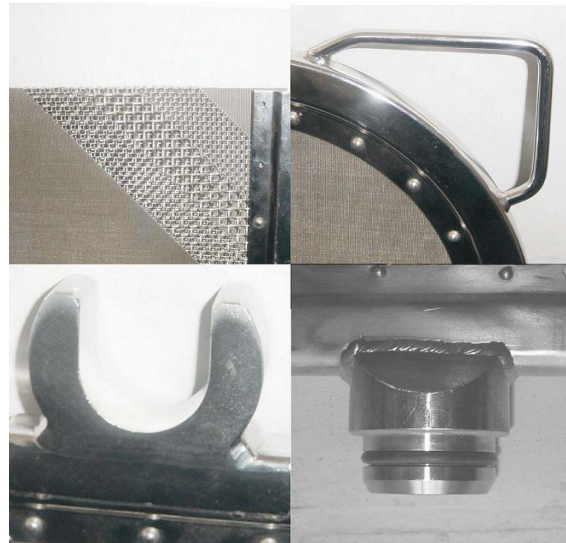


## 2. Pressure leaf system advantages

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.

## 3. Standard design data

Material tank	: carbon steel (stainless steel optional)
Material filter elements	: stainless steel
Design pressure	: -1/6 bar(g)
Design temperature	: 0/150 °C
Max. allowable pressure drop	: 4.5 bar
Design and approval	: PED 97/23/EC U-stamp SELO 02257 (China) GOST-R others upon request



RBDCD model	900	1250	1650	1850	2000
Tank diameter [mm]	900	1250	1650	1850	2000
Feed / Drain	DN80	1x/2x DN80	1x/2x DN100	2x DN100	2x/3x DN125
Filtrate outlet	DN100	DN100	DN100	DN150	DN150
Vent	DN50	DN50	DN80	DN80	DN80
Bottom flush	DN50	DN50	DN50	DN50	DN50

## 4. Specifications

RBDCD Model	Filter Area [m <sup>2</sup> ]	Cake volume [dm <sup>3</sup> ]	Filter volume [dm <sup>3</sup> ]	Leaf spacing [mm]	Filter leaves [-]	Floor space [mm x mm]	Height [mm]	Empty weight [kg]	Feed connections [-]
900/5.5/7	5.5	165	800	100	7	1150 x 2550	1800	800	1
900/10/13	9.5	285	1100	100	13	1150 x 3750	1800	1100	1
1250/12/8	12.5	375	1300	100	8	1500 x 2800	2000	1500	1
1250/15/10	15	450	1800	100	10	1500 x 3200	2000	1700	1
1250/20/14	20	600	2300	100	14	1500 x 4000	2000	1900	1
1250/25/17	25	750	2700	100	17	1500 x 4600	2000	2050	2
1250/30/20	30	900	3100	100	20	1500 x 5200	2000	2200	2
1650/40/16	40	1200	4400	100	16	2000 x 4700	2400	2500	1
1650/50/20	50	1500	5200	100	20	2000 x 5500	2400	2750	2
1650/60/24	60	1800	6000	100	24	2000 x 6300	2400	2810	2
1650/70/28	70	2100	6800	100	28	2000 x 7100	2400	3000	2
1650/80/32	80	2400	7600	100	32	2000 x 7900	2400	3250	2
1850/100/28	100	3000	11000	100	28	2300 x 7200	2400	6500	2
1850/125/35	125	3750	13000	100	35	2300 x 8800	2800	7200	2
2000/150/36	150	4500	14000	100	36	2600 x 10000	2800	7800	2
200/175/42	175	5250	16000	100	42	2600 x 11200	3000	8150	3
200/200/48	200	6000	18000	100	48	2600 x 12400	3000	8500	3
<i>Other models upon request</i>									

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

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