# MVDCD

# VERTICAL PRESSURE LEAF FILTER SYSTEMS

Amafilter<sup>®</sup>'s MVDCD vertical pressure leaf filter system has been extensively used in plants across the world in the Food & Beverages, Chemical, Mining & Minerals and Biofuel industries.

#### The amafilter® MVDCD pressure leaf filter system provides:

## FEATURES AND BENEFITS

- Proven technology
- The pressure leaf filter is a closed filtration system which ensures safety when in use.
- The MVDCD vertical pressure leaf filter system requires only a small footprint.
- Easy access to the filter leaves for removal of the cake.
- It is fully automated, making it safer and requiring limited maintenance, hence lowering operational costs.
- The regeneration time between the filtration cycles is short, lowering operating costs as the filter can filtrate for longer periods without disruptions. This also delivers greater production capacity.
- The pressure filter leaves are easy to clean.
- The pressure leaf filter system has no rotating parts, keeping maintenance to a minimum.
- This filter produces a high filtrate clarity after the clarification run and is also suitable for all kinds of filter aids.
- Reinforced filter leaves elements provide extended lifetime.
- The specifically designed cover gasket does not require replacement each time the filter system cover is opened. The cover gasket comes with special self-sealing properties which ensure a perfect sealing solution and promote maximum safety.
- The pressure leaf filter systems can be made with a heating jacket which maintains elevated process temperatures. This is specifically required to avoid cooling down of the suspension in instances where this is not permitted during the filtration process.
- 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.





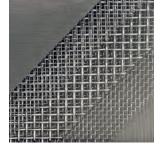
#### STANDARD DESIGN DATA

Criteria	Detail
Tank Material	Carbon Steel (Stainless Steel optional)
Filter Elements Material	Stainless Steel
Design Pressure	-1/6 bar(g)
Desing Temperature	0/150 °C
Max. allowable pressure drop	4.5 bar
Design	ASME VIII div. 1, others on request
Approval	PED 2014/68/EU, SELO 02257 (China) , TR CU (EACU), U Stamp

## DIMENSIONS

Model	508	610	711	780	900	1100	1225	1380	1500 (1500)	1500 (1650)	1650	1850
Tank diameter (mm)	508	610	711	780	900	1100	1225	1380	1500	1500	1650	1850
Element height (mm)	550	550	920	920	920	1250	1250	1350	1500	1650	1800	1800
Feed / Drain (inch)	2	2	2	2	2	3	3	4	4	4	5	5
Filtrate outlet (inch)	3	3	3	3	3	4	4	5	5	5	5	5
Vent (inch)	1	1	1	1	1	1	1	2	2	2	2	2
Cake discharge (inch)	8	8	10	12	14	20	20	24	24	24	24	24





#### AMAFILTER® PRESSURE FILTER LEAVES

Our product range of vertical pressure leaf systems includes an extensive range of filter leaves designs suited for various applications, including food and beverages, chemical and sulphur.

The quality and condition of filter leaves can have a significant impact, not only on the productivity of the filtration system but also on its ability to achieve a high performance standard.

- Suitable for use with the amafilter® Versis® vertical pressure leaf filters.
- Stainless steel 304(L), 316(L), 904L or super duplex. Other alloy materials on request.
- Available in different mesh types and layer combinations.
- Extensive range of reinforced frame types with riveted, welded or bolted box profiles suited to the application
- Excellent pre-coating properties.
- High filtration efficiency, filtrate quality and flux rates.
- Double-sided, stainless steel rigid filter leaves.
- Each filter leave consists of five layers (ply) of stainless steel wire mesh.
- Low pressure-drop.
- Suitable for wet (with filter cloth) and dry cake discharge.
- The top layer of the screen can be customized to the application.
- Re-screening or replacement of filter leaves.



# **SPECIFICATIONS**

Model	Filter Area	Cake volume	Filter leaves	Filter volume	Leaf spacing	Floor space	Height*	Empty Weight	
IVIOGEI	m²	dm³		dm³	mm	mm	mm	kg	
<b>508/550/1.6/</b> 5	1.6	35	5	210	70	1220 x 1100	2110	350	
610/550/2.2/5	2.2	50	5	320	70	1320 x 1300	2210	400	
711/920/3/3	3	70	3	600	70	1340 x 1540	3020	550	
711/920/4.8/5	4.8	105	5	600	70	1340 x 1540	3020	550	
711/920/6.2/7	6.2	135	7	600	70	1340 x 1540	3020	550	
780/920/5/5	5	110	5	800	70	1750 x 1090	3090	650	
780/920/7/7	7	155	7	800	70	1750 x 1090	3090	650	
780/920/8/9	8	175	9	800	70	1750 x 1090	3090	650	
900/920/8/7	8	175	7	1000	70	1190 x 1230	3190	800	
900/920/10/9	10	220	9	1000	70	1190 x 1230	3190	800	
900/920/12.5/11	12.5	275	11	1000	70	1190 x 1230	3190	800	
1100/1250/15/9	15	330	9	2000	70	2370 x 1680	4000	1100	
1100/1250/17.5/9	17.5	385	9	2000	70	2370 x 1680	4000	1100	
1100/1250/20/11	20	440	11	2000	70	2370 x 1680	4000	1100	
1225/1250/23.5/11	23.5	520	11	2500	75	2210 x 2650	4100	1725	
1225/1250/25/11	25	550	11	2500	75	2210 x 2650	4100	1725	
1225/1250/27/13	27	590	13	2500	75	2210 x 2650	4100	1725	
1225/1250/30/15	30	660	15	2500	75	2210 x 2650	4100	1725	
1380/1250/30.5/11	30.5	670	11	3600	75	2900 x 2110	4500	1980	
1380/1350/35/13	35	770	13	3600	75	2900 x 2110	4500	1980	
1380/1350/38.5/15	38.5	850	15	3600	75	2900 x 2110	4500	1980	
1500/1500/42/13	42	920	13	4500	75	3110 x 2300	4880	2300	
<b>1500/1500/46</b> /15	46	1010	15	4500	75	3110 x 2300	4880	2300	
1500/1500/50/17	50	1100	17	4500	75	3110 x 2300	4880	2300	
1500/1650/55/15	55	1210	15	4900	75	3110 x 2350	5180	2500	
1500/1650/60/17	60	1320	17	4900	75	3110 x 2350	5180	2500	
1650/1800/70/16	70	1540	16	6300	75	3770 x 2640	5650	3200	
1650/1800/78/18	78	1720	18	6300	75	3770 x 2640	5650	3200	
1850/1800/85/18	85	1870	18	8200	75	3440 x 3890	3000	4400	
1850/1800/100/20	100	2200	20	8200	75	3440 x 3890	3000	4400	

\*Including lifting height for elements. Other models available upon request. Dimensions are for reference only. Subject to technical alteration without prior notice.



