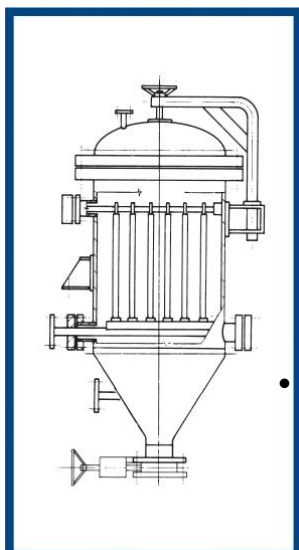


# UNYVER



## PRESSURE LEAF FILTERS

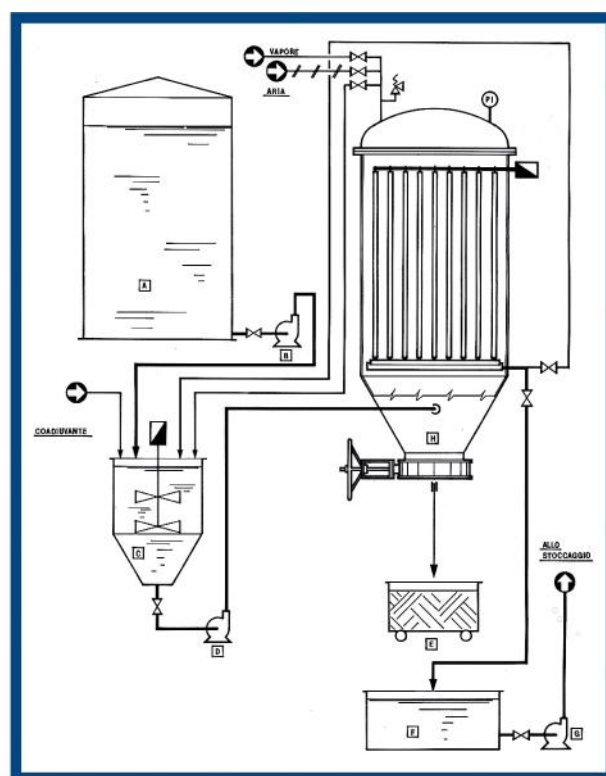
## VERTICAL PRESSURE LEAF FILTER TYPE "FFV"



Vertical leaf filters are recommended for filtration of liquids with medium or low content of solids and where the removal of solids has to be automatically operated. Leaves are vertically mounted and kept parallel with spacers. The filtrate is collected by the manifold which supports the leaves.

The cake is discharged through a large drain nozzle. It is possible dry discharge by vibrator after cake squeezing with air, nitrogen or steam. Options:

- Quick opening closure bayonet type
- Motorized slurry slide valve
- Jacket for circulation of steam, hot water or refrigerating fluid
- Electrical or pneumatic vibrator device to provide easier cake discharge
- Sprayer nozzles systems for wet cake discharge



A TANK OF LIQUID TO BE FILTERED  
B FEED PUMP  
C PRECOAT TANK  
D PRECOAT AND FEED PUMP  
E TANK FOR EXHAUSTED CAKE  
F TANK OF FILTERED LIQUID  
G FEED PUMP FOR FILTERED LIQUID  
H PRECOAT LEAF FILTER

Type	Filtering area m <sup>2</sup>	Cake Volume (lt.) A with S = 25 mm	Filter Volume lt	Dimensions (mm)	
				Height	Floor Space
FFV - 40		42	176	1460	550 x 550
FFV - 55	4,4	110	245	2100	750 x 750
FFV - 65	8	200	425	2400	850 x 850
FFV - 80	11,5	287	630	2550	950 x 950
FFV - 95	17,5	437	890	2700	1150 x 1150
FFV - 110	24,4	610	1170	3000	1400 x 1400
FFV - 125	32	800	1550	3300	1650 x 1650
FFV - 150	50	1250	2390	3770	1800 x 1800

A For standard configuration the pitch between leaves is 75 mm.

## TYPE "FF0" HORIZONTAL PRESSURE LEAF

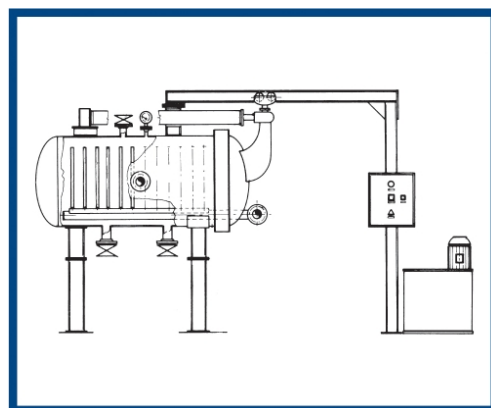
Horizontal arrangement is recommended for filtration of liquids with high solid content.

Leaves are vertically mounted and kept parallel with special spacers. The filtrate is collected by a manifold which supports the leaves.

Cake discharge can be done in wet condition with filter closed or in dry condition with filter opened after drying of cake by air, nitrogen or steam. Leaves are mounted vertically on the internal carriage, which allows easy removal for maintenance, thanks to the device for filter package extraction.

Options:

- Quick opening closure bayonet type
- Jacket for steam circulation, hot water or refrigerating fluid
- Hydraulic device for opening and closure operations
- Hydraulic device for filter package extraction
- Pneumatic or electric vibrator device, for easy cake removal
- Sprayer nozzles system for cake wet discharge



Type	Filtering area M <sup>2</sup>	Leaves Pitch 75 mm		Leaves Pitch 100 mm		Dimensions mm	
		Cake volume S = 25 mm. lt.	Vessel volume lt.	Cake volume S = 40 mm. lt.	Vessel volume lt.	Height	Floor space
FF0 - 60 - 9	2,8	70	260	112	310	1850	800 x 2150
FF0 - 60 - 16	5	125	400	200	500	1850	800 x 3200
FF0 - 90 - 10	7,5	187	650	300	800	2400	1100 x 3150
FF0 - 90 - 14	10,5	262	850	420	1050	2400	1100 x 3750
FF0 - 90 - 20	15	375	1100	600	1400	2400	1100 x 4700
FF0 - 120 - 16	20,5	512	1650	820	2100	2550	1450 x 4000
FF0 - 120 - 20	26	650	2050	1040	2600	2550	1450 x 4600
FF0 - 120 - 24	31	775	2400	1240	3000	2550	1450 x 5200
FF0 - 120 - 31	40	1000	3000	1600	3800	2550	1450 x 6250
FF0 - 150 - 24	50,5	1262	3700	2020	4700	3100	1800 x 6900
FF0 - 150 - 29	61	1525	4400	2440	5650	3100	1800 x 7650
FF0 - 150 - 33	70	1750	4930	2880	6300	3100	1800 x 8250



Photo shows an horizontal leaf filter; the extraction of leaves package as well as the opening of bayonet quick closure is hydraulically done.

## THE FILTER ELEMENT

The filter leaf is manufactured with a drainage member which supports on both side the AISI 316 stainless steel mesh.

All these metallic layers are connected and sealed to a peripheral tubular frame which conveys the filtered liquid to discharge nozzle.



## APPLICATIONS

### CHEMICAL AND PETROCHEMICAL INDUSTRY

- Downstream the plants for depuration and decolorisation of mineral oils
- Full stream or side stream filtration of MEA, DEA
- Downstream the plants for depuration of plasticizers, resins, melted sulphur
- Catalyst recovery
- Separation and eventual recovery of high volumes of solids

### FOOD INDUSTRY

- Downstream the plants for decolorisation and deodorization of edible oils and animal fats
- "Winterization" of seed oils and husk oils

### VARIES

- Recovery of hard metal fine dust from coolants
- Direct filtration of liquids with high solids content (not colloidal)
- Pre-Coat filtration of liquids with high fine solid content (colloidal or non colloidal nature) utilizing diatomaceous earth
- Polishing of liquids with low and high viscosity

## FEATURES

- Low operating cost.
- Automatic operation allows the filtration of hazardous and volatile liquids
- Short time for cake formation due to unique manufacture of leaves which guarantee high effective filtration area and no leakages between frame and meshes

## ADVANTAGES OF UNYVER FILTER

- Better environmental conditions in the filtration of hazardous and volatile liquids thanks to fully automated operation
- All manual handling is eliminated
- High flow rate
- High filtration area compared to overall dimensions of filter.

Data contained in this bulletin are informative and subject to change without notice.

User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.



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