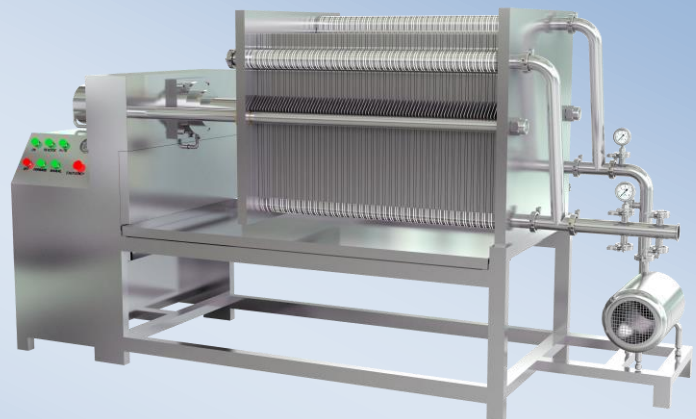


Plate and Frame Type Filter Press

- **Totally enclosed sheet filter system eliminating undesirable product loss**
- **Enclosed design allows for CIP cleaning & SIP sterilization**
- **Mechanical dehydration ensures higher yield & reduction in residual moisture in the filter cake**
- **Mechanical dehydration allows for a dry compact cake in a short time when compared to typical gas drying**
- **Utilizes standard depth filter sheets for maximum selectivity**
- **Sizes from 200 x 200 mm , 400 x 400 mm and 600 x 600 mm available for maximum scalability**
- **Can be equipped with automatic plate shifters and cleaning portals**
- **Filter plate & frame materials are available in 316L & 316 stainless steel**



Leistung's PF series plate & frame type filter press is suitable for coarse, polishing and sterilizing filtration duties. They used in all branches: foodstuffs and drinks, chemistry, pharmaceuticals or in the environmental sector.

Filter presses are pressure filters in which a filter package formed by filter plates & filter frames or chamber plates. Filter plates & filter frames are installed in a stand between a "fix cover" and a "loose cover." These elements are plane parallel to each other and are pressed together by a fixed cover and the loose cover.

The fixed cover is connected to the traverse via connectors and tie bars. Together they form the press stand. The filter package is pressed together by a pressure unit which is incorporated in the traverse and acts on a loose cover.

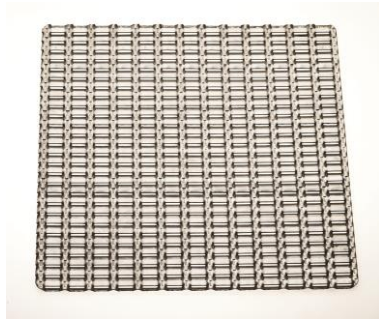
Between the individual filter plates there are filter pads which have an outward sealing function under the pressure applied. The filtrate is conveyed into the chambers formed by the filter element via a pump. The filtrate passes through the filter medium, leaves filter via internal or external outlet channels and is conveyed further according to its intended usage.

Filtration produces a filter cake, which can be washed if required.

The filtration capacity, which mainly depends on flow geometry of a plate, has been increased by use of screen. The effective filtration area is therefore 40% more than the perforated screen.

Technical Data

No. of Plates	As per requirement
Available Plate Size	200 x 200, 400 x 400, 600 x 600 mm
Plate Height	13 mm, 25 mm, 40 mm
MOC	SS – 304, 304L, 316, 316L, Duplex
Media	Liquid & Semi-liquid products
Pressure Rating	1 – 15 bar
Temperature Rating	-25°C to +65°C, more on request
Closure	Screwed / Hydraulic
Sealing material	EPDM, Silicon, FKM /FPM (fluoroelastomer)
Support	Mounted on Skid
Surface Finish	Matt Finish, Mirror Finish
Optional Finish	Electro polish on plates and frames
Options	Centrifugal, lobe or gear pump for pressure filtration
Accessories (Optional)	Pressure Gauge, Vent Valve, Drain Valve



Leistung PF series plate and frame housing consists an innovative, rouge design, high performance screen with an open filtration area that is 40% larger than perforated screens. The unique geometry of this screen optimizes the flow path and enables full use of filtration area. Increased filter area translates into better flow distribution. This optimized filter sheet performance results in longer service life.

Reduced Space Requirements

The filter plate has a reduced space requirement of approx. 30% and the same stability as the material previously used.

Economic Efficiency

Important savings of filter material by increase of performance respectively better utilization of filter sheets.

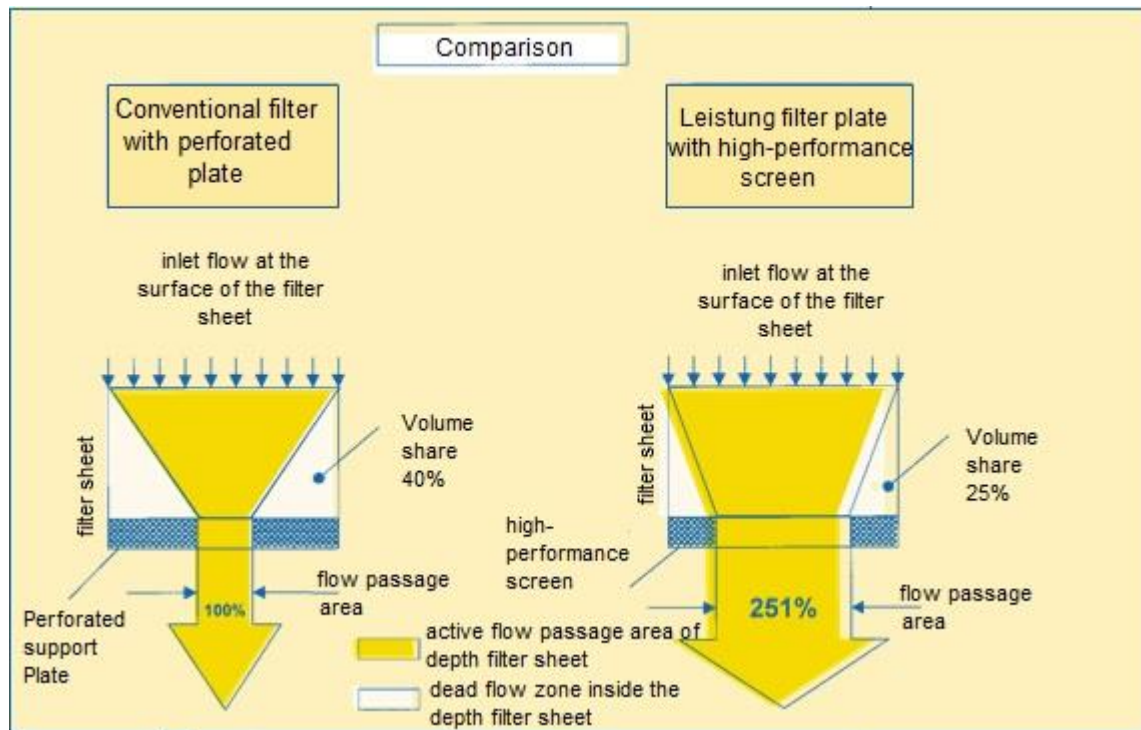
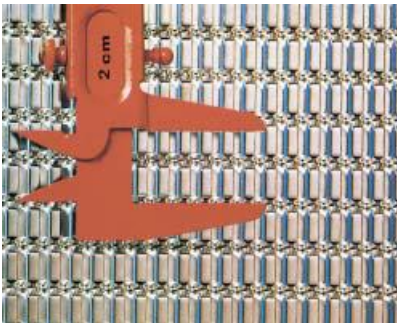
User specifications 20% - 40%

Practical experience of several years has shown an important increase of performance for the filtration with depth filter sheets. This increase of performance can result in an extended life time of the filter sheet or in an increase of the specific flowrate.

Leistung high-performance filter plates achieve an essentially better utilization of the used depth filter sheets.

Saving of energy up to 40%

An important condition for an effective sterile filtration is a sterile filter. This requires a sufficient rinsing respectively regeneration and sterilization of filter sheets inclusive the peri-pherical equipment before filtration



Filtration Capacity

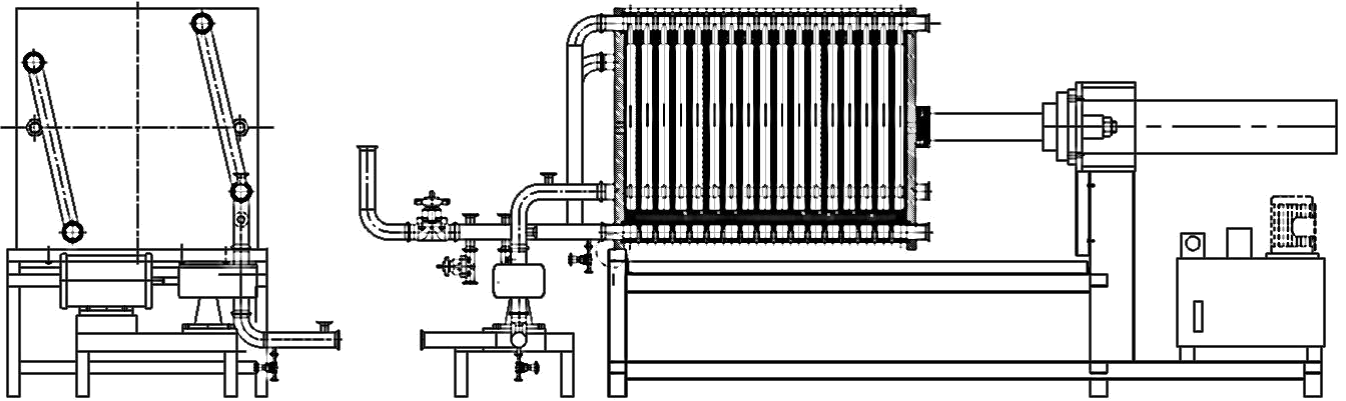
Sheet filtration is a depth filtration and uses the inner volume of the inserted filter sheet. The filtration capacity, which mainly depends on the flow geometry of a plate, has been essentially increased by the new developed supporting body. The effective filtration area is now 2.5 times larger than that of a common plate with perforated plates. Hence an optimal utilization of filter sheet filtration surface has been achieved and is complimented by the fact that the flow of product through the filter sheet is hardly affected by the support body. In combination with the known advantageous flow characteristics of Leistung filter plates the highest possible total performance of filter sheets is reached.

Pre and Post Runs

Extremely reduced pre and post runs (head and tails) have been accomplished with this Leistung stainless steel plate. The dead volume in the filter plate has been reduced by approx. 40% compared to conventional stainless steel plates.

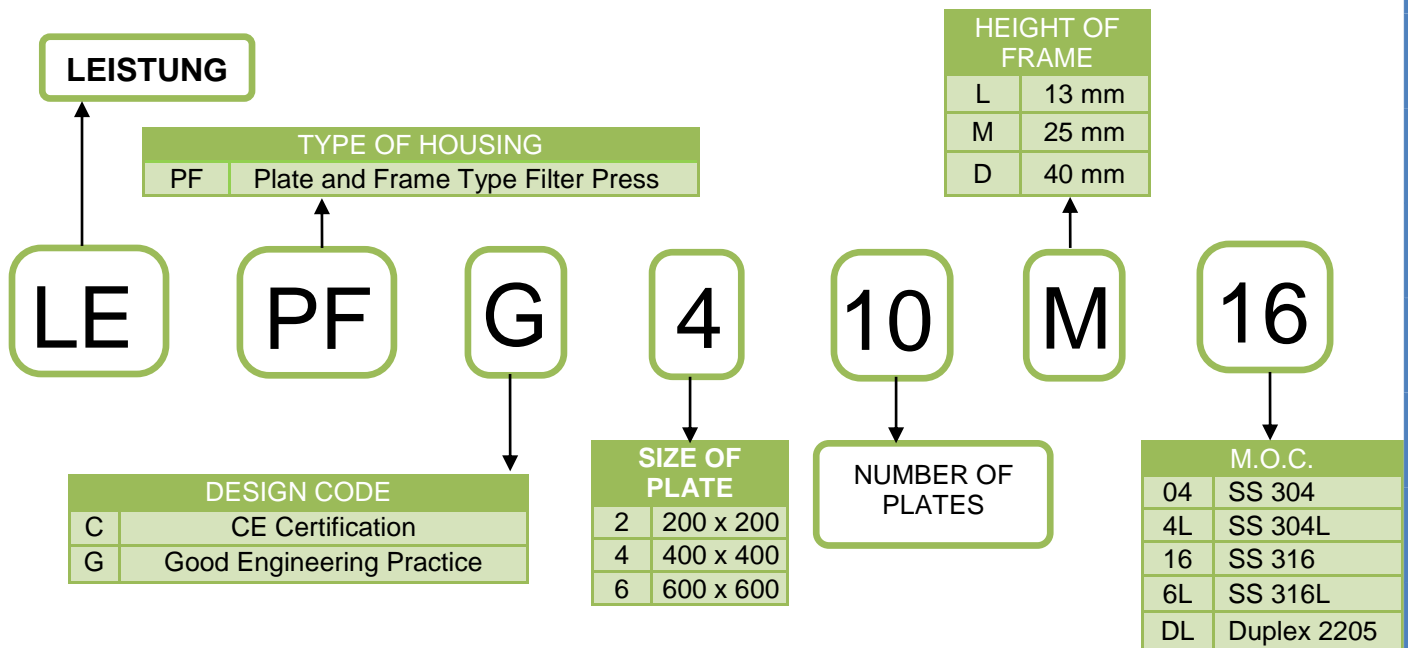
Weight

The weight of the plate has been reduced to less than half the weight of a conventional plate. The advantages in respect of handling and foundation load are obvious.



Ordering Chart

ORDER IDENTIFICATION NUMBER



Technical Data

PF Series Plate and Frame Type Filter Press

Sr. No.	Size of Plate	Filtering Area per Plate (m ²)	Cake Holding Capacity per Frame (Liters)		
			13 mm	25 mm	40 mm
1	200 x 200	0.057	0.375	-	-
2	400 x 400	0.265	1.710	3.310	5.280
3	600 x 600	0.640	4.000	7.700	12.700