

SIGMADAF

FILTER PRESS SIGMADAF FP

Sigmadaf designs and manufactures filter presses with lateral transfer of plates for the separation of solids and liquids. This process is more commonly known as sludge drying, or sludge dewatering.

Our filter presses guarantee excellent performance in all types of industrial processes and wastewater treatment.

The filter presses with side transfer are ideal for working with small and medium production of cakes, which is the name given to the solids separated and drained to the maximum.

Our wide range of filter presses can be manufactured with multiple degrees of automation, according to the customer's needs, or to the technical characteristics of the product to be filtered.

The main materials of construction are: Carbon steel, SS316, SS304, Polypropylene.

OUR MODELS

SIGMADAF FP-M: Opening and closing of the filter press by means of a double-acting hydraulic cylinder by means of a manually operated hydraulic pump. Manual displacement of the polypropylene levers.

SIGMADAF FP-HM: Opening and closing of the electro-hydraulic filter press, automatic, with control panel. Manual displacement of the polypropylene levers.

SIGMADAF FP-A: Electro-hydraulic, automatic opening and closing of the filter press, automatic displacement of the polypropylene levers by means of 4 link chains.

SIGMADAF FP-AR: Electro-hydraulic, automatic opening and closing of the filter press, automatic displacement of the polypropylene levers by means of 4 link chains and with automatic plate shaker.

SIGMADAF FP-ATL: Electro-hydraulic, automatic opening and closing of the filter press, automatic displacement of the polypropylene levers and automatic plate shaker. The plates are moved one by one with a back-and-forth plate transfer carriage.



TECHNICAL CHARACTERISTICS OF FILTER PLATES

- Standard sizes from 250 to 1500 mm.
- Available configurations: open and closed.
- Position of the feeding nozzles: central, upper central, off-center, corner and external.
- Maximum standard filtration pressure from 6 to 16 bar
- Minimum/maximum temperature: from -10 to +120 C°.
- Plate manufacturing materials: polypropylene homopolymers / copolymers; antistatic polymers; PVDF.
- Membrane materials: PP, PVDF, PTFE, etc.
- Welded or removable membranes.

FILTER FABRICS

We have a wide range of filter fabrics that adapt to the needs of each process.

The main characteristics of our filter fabrics are detailed below:

- Materials: polypropylene (PP), polyethylene (PE), polyester, polyamide (Nylon), rilsan.
- Types of yarn fibers: multifilament, monofilament, staple fiber.
- Finishes: plain weave, twill weave, satin weave, basket weave
- An automatic scrolling frame system that cleans the fabrics with pressurized water can be included.

CONTROL PANEL

We design and install customized electrical panels to meet the specific technical requirements of our customers, both in terms of switchgear and control brands and type of programming.

We use programmable logic controllers (PLC) as the basis for the control of the automation of the filter press or installation, and we use touch screens (HMI) to facilitate the interaction between the user and the machine, allowing an easy adjustment of set points and modifiable parameters of the installation.

OPTIONAL COMPONENTS AND CONFIGURATIONS

Sigmadaf’s filter presses can be customized and delivered with multiple accessories, among which the following stand out:

- Manifold.
- Manifold with cross cake drying.
- Manifold with cake drying and cross washing.
- Drip collection tray.
- Camera plates.
- Chamber/membrane plates (mixed package).
- Membrane plates.
- Lining of wetted parts in direct contact with the product to be filtered. in stainless steel, polypropylene.
- Filter presses 100% stainless steel lined, polished, for food and pharmaceutical industry.
- ATEX filter presses.
- Etc.

FILTER VOLUME IN LITERS PER NUMBER OF PLATES FILTER PRESS WITH MANUAL PLATE TRANSFER

FP SIZE	PLATE NUMBER													
	5	10	15	20	25	30	35	40	50	60	70	80	90	100
250x250	5	9	13	18										
470x470	18	40	62	84	106	128	150							
630x630		72	112	153	193	233	273	313						
800x800			192	261	329	398	466	535	672					
1000x1000				429	541	654	767	880	1.105	1.331	1.556			
1200x1200					752	908	1.065	1.221	1.535	1.848	2.161	2.474		
1300x1300							1.258	1.443	1.813	2.183	2.553	2.923	3.293	
1500x1500								2.003	2.516	3.029	3.543	4.056	4.570	5.084

FILTER PRESS WITH AUTOMATIC PLATE TRANSFER

FP SIZE	PLATE NUMBER													
	5	10	15	20	25	30	35	40	50	60	70	80	90	100
470x470	18	40	62	84	106									
630x630		72	112	153	193	233								
800x800			192	261	329	398	466	535	672					
1000x1000				429	541	654	767	880	1.105	1.331	1.556			
1200x1200					752	908	1.065	1.221	1.535	1.848	2.161	2.474		
1300x1300							1.258	1.443	1.813	2.183	2.553	2.923	3.293	
1500x1500								2.003	2.516	3.029	3.543	4.056	4.570	5.084

ADVANTAGES OF FILTER PRESSES SIGMADAF FP

Our filter presses have been specially designed to offer the following advantages during a wastewater treatment process:

- Higher degree of dryness.
- Great reduction in sludge volume, which considerably reduces transportation and disposal costs.
- Low reagent consumption.
- Low power consumption.
- Long service life.
- Easy-to-operate equipment that requires little maintenance.
- Adaptability to a wide variety of sludges, both industrial and urban.

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