

## **Filter Plate for Filter Press**

## **♦** Description

Filter Plate is the key part of filter press. It's used to support filter cloth and store the heavy filter cakes. The quality of the filter plate (especially the flatness and precision of the filter plate) is directly related to the filtering effect and service life.

Different materials, models and qualities will affect the whole machine's filtration performance directly. Its feeding hole, filter points distribution (filter channel) and filtrate discharge channels have different designs according to different materials.

Material of filter plates	PP plate, membrane plate, cast iron filter plate, stainless steefilter plate.				
Form of feeding	Middle feeding, corner feeding, upper middle feeding, etc.				
Form of filtrate discharging	Seen flow, unseen flow.				
Type of plate	Plate-frame filter plate, chamber filter plate, membrane filter				
	plate, recessed filter plate, round filter plate.				

### **♦** Parameter list

Model (mm)	PP Camber	Diaphragm	Closed	Stainless steel	Cast Iron	PP Frame and Plate	Circle
250×250	1			2		6	6
380×380	1			<b>√</b>	<b>√</b>	<b>V</b>	
500×500	1		1	1	1	<b>V</b>	
630×630	1	1	1	1	1	1	1
700×700	1	N	1	<b>√</b>	1	<b>√</b>	
800×800	1	<b>√</b>	1	1	<b>√</b>	1	√
870×870	1	1	1	1	<b>√</b>	<b>√</b>	
900×900	<b>V</b>	1	1	1	V	<b>√</b>	
1000×1000	1	<b>√</b>	1	<b>√</b>	√	<b>V</b>	√
1250×1250	1	<b>√</b>	<b>√</b>	<b>√</b>		<b>√</b>	<b>√</b>
1500×1500	1	<b>√</b>	1	- ·			√
2000×2000	1	V	1	<b>H</b> 1	ITA	10	
Temperature	0-100°C	0-100°C	0-100°C	0-200°C	0-200°C	0-80°C	0-100°C
Pressure	0.6-1.6Mpa	0-1.6Mpa	0-1.6Mpa	0-1.6Mpa	0-1.0Mpa	0-0.6Mpa	0-2.5Mpa



## **Chamber/PP Filter Plate**

#### 1. Brief Introduction

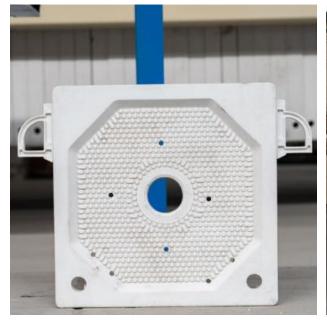
Polypropylene (PP), also known as high molecular weight polypropylene. This material has excellent resistance to various acids and alkali, including strong acid hydrofluoric acid. It has strong toughness and rigidity, improving the compression sealing performance. Suitable for filter presses.

#### 2. Feature

- 1. Modified and reinforced polypropylene with a special formula, molded in one go;
- 2. Special CNC equipment processing, with a flat surface and good sealing performance;
- 3. The filter plate structure adopts a variable cross-section design, with a conical dot structure distributed in a plum blossom shape in the filtering part, effectively reducing the filtration resistance of the material;
- 4. The filtration speed is fast, the design of the filtrate flow channel is reasonable, and the filtrate output is smooth, greatly improving the working efficiency and economic benefits of the filter press.
- 5. The reinforced polypropylene filter plate also has advantages such as high strength, light weight, corrosion resistance, acid, alkali resistance, non-toxic, and odorless.

#### 3. Models

380mm×380mm; 500mm×500mm; 630mm×630mm; 800mm×800mm; 870mm×870mm; 1000mm×1000mm; 1250mm×1250mm; 1500mm×1500mm; 2000mm×2000mm







## **Membrane Filter Plate**

#### 1. Brief Introduction

The diaphragm filter plate is composed of two diaphragms and a core plate combined by high-temperature heat sealing. An extrusion chamber (hollow) is formed between the membrane and the core plate. When external media (such as water or compressed air) is introduced into the chamber between the core plate and the membrane, the membrane will be bulged and compress the filter cake in the chamber, achieving secondary extrusion dehydration of the filter cake.

#### 2. Feature

- 1. The PP filter plate (core plate) adopts reinforced polypropylene, which has strong toughness and rigidity, improving the compression sealing performance and corrosion resistance of the filter plate;
- 2. The diaphragm is made of high-quality TPE elastomer, which has high strength, high resilience, and high-temperature and high-pressure resistance;
- 3. The working filtration pressure can reach 1.2MPa, and the pressing pressure can reach 2.5MPa;
- 4. The filter plate adopts a special flow channel design, which increases the filtration speed by about 20% and reduces the moisture content of the filter cake.

#### 3. Models

630mm×630mm; 800mm×800mm; 870mm×870mm; 1000mm×1000mm; 1250mm×1250mm; 1500mm× 1500mm; 2000mm×2000mm









## **Round Filter Plate**

#### 1. Brief Introduction

Its high pressure is at 1.0---2.5Mpa. It has the feature of higher filtration pressure and lower moisture content in the cake.

#### 2. Feature

- 1. Modified and reinforced polypropylene with a special formula, molded in one go.
- 2. Special CNC equipment processing, with a flat surface and good sealing performance.
- 3. The filter plate structure adopts a variable cross-section design, with a conical dot structure distributed in a plum blossom shape in the filtering part, effectively reducing the filtration resistance of the material;
- 4. The filtration speed is fast, the design of the filtrate flow channel is reasonable, and the filtrate output is smooth, greatly improving the working efficiency and economic benefits of the filter press.
- 5. The reinforced polypropylene filter plate also has advantages such as high strength, light weight, corrosion resistance, acid, alkali resistance, non-toxic, and odorless.

### 3. Application

It is widely used in the yellow wine filtration, rice wine filtration, stone wastewater, ceramic clay, kaolin and the construction material industry.







## **Closed Filter Plate (CGR Filter Plate)**

#### 1. Brief Introduction

The embedded filter plate (sealed filter plate) adopts a embedded structure, the filter cloth is embedded with sealing rubber strips to eliminate leakage caused by capillary phenomenon. The sealing strips are embedded around the filter cloth, which has good sealing performance.

The edges of the filter cloth are fully embedded in the sealing groove on the inner side of the filter plate and fixed.

Suitable for volatile products or concentrated collection of filtrate, effectively avoiding environmental pollution and maximizing the collection of filtrate.

The sealing strip is made of various materials such as ordinary rubber, EPDM, and fluororubber, which can meet the needs of different users.

#### 2. Feature

- 1. High temperature resistance, high pressure resistance, anti-corrosion, best sealing performance.
- 2. The water content of high-pressure filtration materials is low.
- 3. Fast filtration speed and uniform washing of filter cake.
- 4. The filtrate is clear and the solid recovery rate is high.
- 5. Embedded filter cloth with sealing rubber ring to eliminate capillary leakage.
- 6. The filter cloth has a long service life.

#### 3. Models

500mm×500mm; 630mm×630mm; 800mm×800mm; 870mm×870mm; 1000mm×1000mm; 1250mm×1250mm; 1500mm×1500mm; 2000mm×2000mm







## **Stainless Steel Filter Plate**

#### 1. Brief Introduction

The stainless steel filter plate is made of 304 or 316L all stainless steel, with a long service life, corrosion resistance, good acid and alkaline resistance, and can be used for filtering food grade materials.

#### 2. Feature

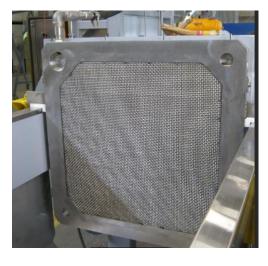
- 1. The stainless steel filter plate is welded to the outer edge of the stainless steel wire mesh as a whole. When the filter plate is backwashed, the wire mesh is firmly welded to the edge. The outer edge of the filter plate will not tear or cause damage, ensuring the quality of the filtered liquid without the need for frequent replacement.
- 2. The stainless steel filter plate and stainless steel wire mesh have high strength and are not affected by the flushing strength.
- 3. Stainless steel wire mesh is not easy to adhere impurities and block. After filtering the liquid, it is easier to rinse and is more suitable for filtering high viscosity and high strength liquids.

### 3. Application

Widely used in industries such as metallurgy, chemical engineering, printing and dyeing, ceramics, food, medicine, mining, coal washing, etc.

#### 4 Models

380mm×380mm; 500mm×500mm; 630mm×630mm; 800mm×800mm; 870mm×870mm; 1000mm×1000mm







## **Cast Iron Filter Plate**

#### 1. Brief Introduction

The cast iron filter plate is made of cast iron or ductile iron precision casting, suitable for filtering petrochemical, grease, mechanical oil decolorization and other products with high viscosity, high temperature, and low water content requirements.

#### 2. Feature

- 1. Long service life 2. High temperature resistance 3. Go
  - 3. Good anti-corrosion

### 3. Application

Widely used for decolorization of petrochemical, grease, and mechanical oils with high viscosity, high temperature, and low water content requirements.

#### 3. Models

500mm×500mm; 630mm×630mm; 870mm×870mm; 1000mm×1000mm











## Plate and Frame filter plate

### 1. Brief Introduction

The filter plate and filter frame are arranged in order to form filter chamber, easy to install filter cloth.



### 2. Models

380mm×380mm; 500mm×500mm; 630mm×630mm; 800mm×800mm; 870mm×870mm; 1000mm×1000mm; 1250mm×1250mm;



