



# Polyab Safa Company

Specialized manufacturer of filter press machines,  
fabrics, Plates and frames

# We Introduce Polyab Safa Company

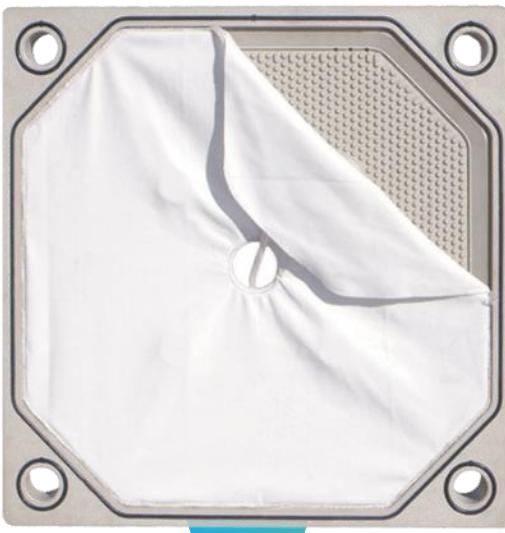


As a leader in solid-liquid separation technologies, Polyab Safa Engineering offers quality products to a variety of industries, including food, pharmaceuticals, cosmetics, hygiene, dairy, textiles, chemicals, mining, ceramics, water, and wastewater.

To provide high-quality products tailored to customer needs, data such as sludge type, operating conditions, PH, solids content, filtration rate, and device capacity are collected, analyzed in the design unit, selected, and transferred to production. Filter press devices, plates, and auxiliary products are manufactured with the finest raw materials, tested, and delivered.

Our R&D and technical team, drawing on years of experience, continuously improves design, quality, and innovation. Through collaboration with international manufacturers, we utilize cutting-edge technologies in filter press production.

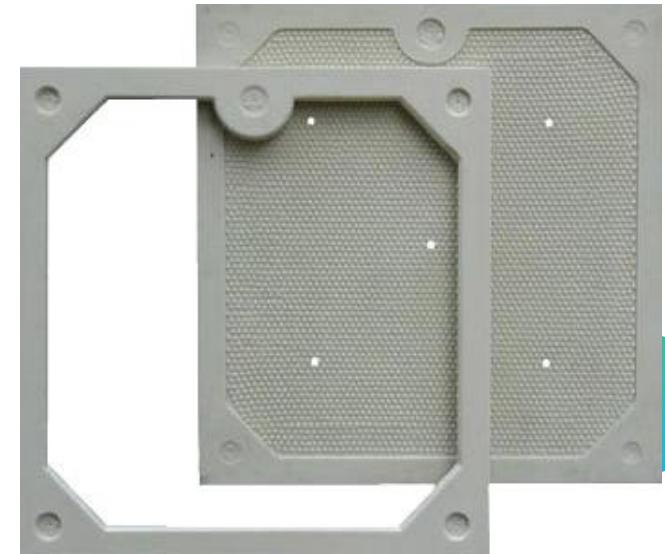
# Products



**filter press fabric**



**Filter press machine**



**Plate filter press**

# Filter Press Machine

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## Filter Press Machine

A filter press is a piece of industrial equipment commonly used to separate liquids from solids in production and purification processes. It is used in industries that handle slurries, sludges, or liquids containing solid particles, such as the chemical, mining, pharmaceutical, food, and steel industries, and helps reduce waste volume and purify contaminated liquids.

### Operating steps:

- Slurry injection
- Hydraulic pressure application
- Filtration process
- Solid cake discharge
- Preparation for the next cycle

### Structure and Function

A filter press consists of a series of fabric-covered filter plates. The slurry flows between the plates, and a hydraulic or mechanical jack creates the necessary pressure to separate the liquid from the solids. The solids remain on the filter cloth, forming a dry cake, while the purified liquid is discharged from the machine.

# Filter Press Machine

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## Applications:

Industrial wastewater treatment  
Petrochemical and chemical industries  
Steel and mining industries  
Pharmaceutical and food industries  
Textile and paint industries

## Technical specifications and device selection:

Number of plates: 10 to 100

Plate dimensions: 400×400 to 2000×2000 mm

Treatment capacity: 1 to 50 cubic meters per hour

Operating pressure: 6 to 16 bar

Device selection depends on the wastewater pH, solids percentage, inlet flow rate, and installation area.

# Filtre Press Plates

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## Application:

Chemical industries

Food and pharmaceutical production

Mining

Refineries

Water and wastewater treatment



The filter press plate is one of the key components of filtration devices that is responsible for separating liquids from solids. These plates, with their engineering design and the use of resistant polypropylene PP materials, withstand high pressures and have excellent chemical resistance, ensuring the efficiency and durability of the device.

## Filter press plate materials:

Polypropylene (PP) is one of the most common and widely used polymer materials in the manufacture of filter press plates. This polymer material is easy to handle and install due to its light weight. In terms of chemical resistance, polypropylene shows excellent performance and is resistant to a wide range of acids, bases, salts and many chemical solvents; for this reason, it is very suitable for the chemical, pharmaceutical, food and wastewater treatment industries.

## Types of filter press plates:

**Chamber Plate:** Simple design, suitable for high slurry volumes, long life.

**Membrane Plate:** Flexible membrane, reduces solids moisture.

**Frame & Plate:** Suitable for applications requiring frequent cleaning.

# Filter press cloth

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Filter press fabrics are one of the most important components of filter press equipment.

Their function is to separate solid particles from liquids and form a filter cake.

As the liquid passes through the pores of the fabric, the solids collect on the surface or within the fibers.



## Weave Types

Plain → General Use

Satin → More Permeable, for Fine Particulates

Twill/Serj → Durable, Medium Permeability

Oxford & Leno → Different Permeability and Strength Options

## Yarn Types

Filament (single fiber): Stronger, less permeable, for coarse particles.

Stapled (short fiber): More permeable, for fine particles.

# Filter press cloth

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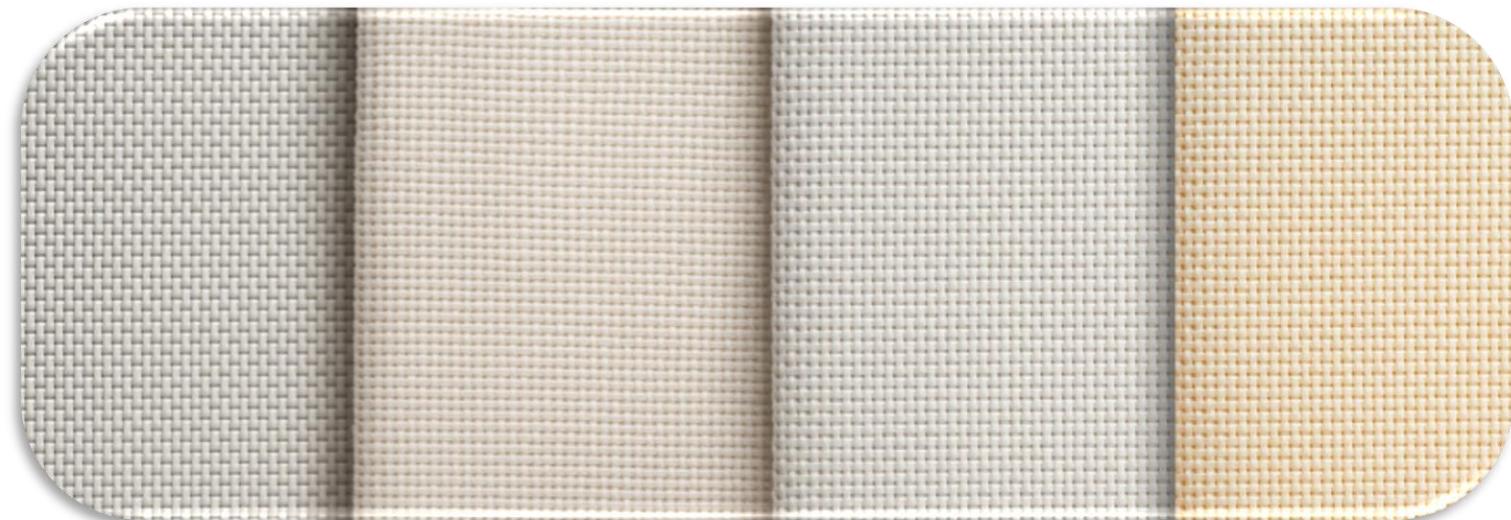
## Material Types

Polypropylene (PP): Resistant to acidic and alkaline solutions, economical, and easy to wash.

Polyester (PE): Resistant to high pressure, good sealing, and long-lasting.

Polyamide (Nylon): High abrasion resistance, hygienic for food and pharmaceuticals.

Cotton: Suitable for medium temperatures and neutral solutions, but limited in hygienic processes.



## Filter press fabric table

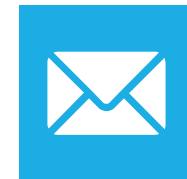
Nylon	Linen	Polyester	pp	Fabric dimensions	Page dimensions
✓	✓	✓	✓	250×250 mm	200×200 mm
✓	✓	✓	✓	350×350 mm	300×300 mm
✓	✓	✓	✓	450×450 mm	400×400 mm
✓	✓	✓	✓	550×550 mm	500×500 mm
✓	✓	✓	✓	670×670 mm	570×570 mm
✓	✓	✓	✓	670×670 mm	600×600 mm
✓	✓	✓	✓	700×700 mm	630×630 mm
✓	✓	✓	✓	770×770 mm	700×700 mm
✓	✓	✓	✓	900×900 mm	800×800 mm
✓	✓	✓	✓	1000×1000 mm	900×900 mm
✓	✓	✓	✓	1100×1100 mm	1000×1000 mm
✓	✓	✓	✓	1200×1200 mm	1100×1100 mm
✓	✓	✓	✓	1300×1300 mm	1200×1200 mm
✓	✓	✓	✓	1350×1350 mm	1250×1250 mm
✓	✓	✓	✓	1600×1600 mm	1500×1500 mm
✓	✓	✓	✓	2100×2100 mm	2000×2000 mm

# Contact us



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