



Polyab Sifa

Manufacturer of Filter Press plates and devices



Polyab Safa Engineering Company As a leading company in designing and manufacturing liquid-solid separation technologies in various industrial processes, its quality products are adapted for use in a variety of industrial applications including food and pharmaceutical industries, cosmetics, dairy, textile industries. Offers chemicals, mining and metallurgy, ceramic tiles, water and sewage and more. The purpose of this industry group is to provide high quality product and reasonable price according to customer's needs. In this regard, basic information including type of sludge, operating conditions, ambient pH, percentage of solids, filtration rate, device capabilities, etc. are received from the customer and referred to the design unit. After analyzing and analyzing the data, the type of device is designed, selected and presented to the production unit according to the customer's needs. In this regard, polyester water filter presses, plates and by-products are manufactured using the best raw materials and delivered to customers after functional tests. Research and development unit, engineers and technical team of Polyab Safa, with many years of experience in the filtration industry, strives for continuous improvement of design, quality as well as innovation according to customer needs. Safa Poly Water, due to its constant access to and contact with reputable international manufacturers, has built the knowledge of the day to design and manufacture its own filter presses.



Filter press

An industrial filter press is a tool used in separation processes, specifically to separate solids and liquids. The process uses the principle of pressure drive, [clarification needed] as provided by a slurry pump. Among other uses, filter presses are utilized in marble factories in order to separate water from mud in order to reuse the water during the marble cutting process.

Manual Filter Press System

Manual Filter Press System 200

The filter press machine 20 * 20 is used in laboratories. The filter press machine made by this company is in the range of laboratory machines and is the smallest in size and dimensions. Filter press 200 is often used to test and test material samples to obtain material filtration results. The pressurized system of the filter press machine 200 is a manual screw and the base of the machine is fixed and wheeled. The chassis and body of the pressurizer 200 are made of carbon steel material and with epoxy paint coatings resistant to corrosive and acidic environments. Polyab Safa company also adds a dropper tray, cover and lender to drain the solution for the filter press machine 20 * 20.





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Manual Filter Press System 300

The filter press machine 30*30, is the second largest machine manufactured by the Polyab Safa company. The 300 press filter machine is used for testing and testing sample materials and solutions to obtain filtration properties in laboratories. In some workshops that are less soluble in volume, 30*30 filter presses are also used, such as lubrication of oilseeds or date sap, etc. The pressurized system of the Filter Press 300 is a manual screw, and the base of the machine is fixed and wheeled, making it easy to move due to its small weight and size. The chassis and body of the pressurizer 300 are made of carbon steel material and with epoxy paint coatings resistant to corrosive and acidic environments. Polyab Safa company also adds a dropper tray, cover and lender to drain the solution for the filter press machine 30*30.



Manual Filter Press System 400

40 * 40 filter press machine is another group of small size machines made by the company that are designed and manufactured as manual screws and hydraulic jacks. The Filter Press 400 is most often used for testing and testing the sample material to obtain the filtration properties and to choose the type of test press and pilot production material.



Manual Filter Press System 600

60*60 filter press machine is another group of small size machines made by the company that are designed and manufactured as manual screws and hydraulic jacks. The Filter Press 600 is most often used for testing and testing the sample material to obtain the filtration properties and to choose the type of test press and pilot production material.





Hydraulic Press Filter (Semi-Automatic)

Hydraulic filter press machines are widely used in various industrial applications. In these machines, hydraulic press sheets are opened and closed.

- Semi-automatic Filter press Machine 400
- Semi-automatic Filter press Machine 600
- Semi-automatic Filter Press Machine 800
- Semi-automatic Filter Press Machine 1000
- Semi-automatic Filter Press Machine 1200
- Semi-automatic Filter Press Machine 1250
- Semi-automatic Filter Press Machine 1500

These devices will include the main structure, filter press plates, hydraulic unit and electrical control sections. Most of the machines used by industries are manufactured and used in this type. Compared to manual press filters, cakes from hydraulic press filters will be due to higher and higher pressures, lower residual moisture content, higher cake uniformity, higher filtration and refining capacity. They are used in chemical, petroleum, pharmaceutical, light industry, food, water treatment, electroplating, metallurgy and textile industries.

Semi-automatic Filter Press Machine 400

The small size semi-automatic filter press machine is manufactured by Polyab Safa CO. Filter press 400 is most often used to test and test the sample to test the sample material and to obtain filtration properties and to select the type of filter press fabric and pilot production and material. The pressurized system is a semi-hydraulic and electric hydraulic 40 * 40 pressurizer and the base unit is fixed or wheeled. The body and chassis of the 400 Pressure Filter is made of carbon steel, epoxy double-layer paint resistant to corrosive and acidic environments. According to customer 's order, Polyab Safa company implements a 40 * 40 dropper filter tray, cover and landing drain solution.





Semi-automatic Filter Press Machine 600

The Filter Press 600 of Polyab Safa is developed in the category of industrial machines and is capable of being the best industrial machines in size and power. The filter press machine 600 is used mostly in low-scale industrial applications and in low-capacity filtration lines with low cake volume. pressurizer system of the filter press 600 is electrically hydraulic and its base is fixed or wheeled . Carbon steel filter press 600 body with a two-layer epoxy coating that is resistant to acidic and corrosive environments. Polyab Safa Company provides this device at customer's request with dropper tray, cover, drain landing pad.

Semi-automatic Filter Press Machine 800

The Filter Press machine 800 of Polyab Safa is one of the most used industrial machines in terms of size. The filter press 800 is most commonly used in medium-scale industrial applications and in medium-capacity filtration lines with high cake volume. The pressurizing system of the filter press 800 is either semi-hydraulic or electric-hydraulic and its base is fixed. Carbon steel filter press 800 body with double layer epoxy coating that is resistant to acidic and corrosive environments Polyab Safa Company provides this device at customer's request with dropper tray, cover, drain landing pad.

Semi-automatic Filter Press Machine 1000 - 1500

Filter press 1000 - 1500 machines are in the category of large industrial machines. Filter presses 1000 - 1500 are mostly used in large-scale industrial applications and in high-capacity filtration lines and high cake volume. This model can be used in all areas of liquid separation. The pressurizing system of the filter presses 1000-1500 are either semi-hydraulic or electric-hydraulic and its base is fixed. Body of these devices is Carbon steel with double layer epoxy coating that is resistant to acidic and corrosive environments Polyab Safa Company provides these devices at customer's request with dropper tray, cover, drain landing pad.





Fully Automatic Filter Press

Polyab Safa Filter Press is a manufacturer of filter press machines with the ability to move and shake plates, dewater and discharge cakes using PLC control system and related sensors automatically. Features of these devices include reduced filtration time, increased filtration capacity per shift (due to reduced time between steps), reduced dependence on manpower and increased solids volume.

Types OF Automatic Filter Press

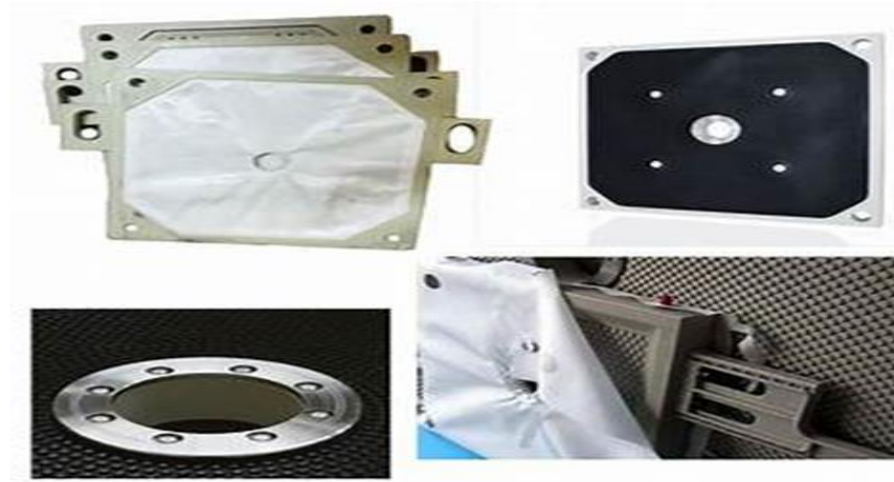
- Automatic Filter press Machine 600
- Automatic Filter Press Machine 800
- Automatic Filter Press Machine 1000
- Automatic Filter Press Machine 1200
- Automatic Filter Press Machine 1250
- Automatic Filter Press Machine 1500





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Filter Press Plates



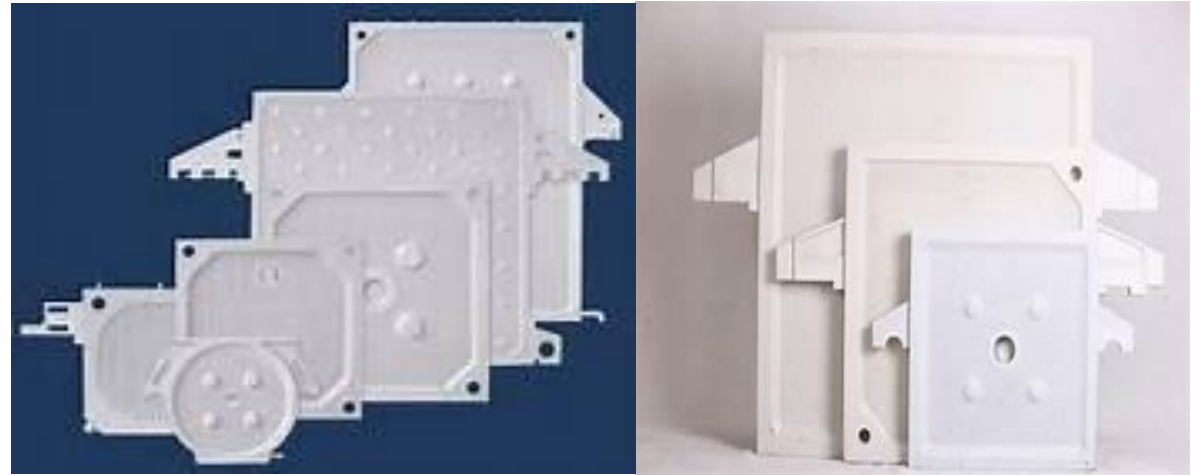
❖ Membrane filter press

- Membrane squeezing make the filter cakes more drier than chamber filter press.
- Automatic plate shifter discharging for labor saving.
- Siemens PLC control.
- Hydraulic pressing for good sealing effect.
- Short processing cycle time.



❖ **Plate & frame filter press(normal pressure)**

- **Suitable for fine filtration**
- **Filter paper could be filtering medium**
- **Plate & frame type design**
- **Optional for filter plate materials**
- **Manual cake discharging**



chamber filter press

- **Membrane squeezing to make the filter cakes as dry as possible**
- **Automatic discharging for labor saving**
- **Siemens PLC control.**
- **Hydraulic pressing ensures best sealing performance.**
- **Short processing cycle time**
- **Slurry feeding pressure 0.8MPa-2.5MPa**



❖ FILTER CLOTH

Filter cloth selection is one of the key variables in the optimization of any liquid filtration application. Critical considerations in the selection of filter cloth include its resistance to blinding, ease of filter cake discharge, resistance to chemical attack, thermal properties, abrasion resistance, particle retention, and more.



❖ FILTER CLOTH SPECIFICATIONS TO CONSIDER

There are a number of factors to consider in choosing the best filter cloth for your application, all having an impact upon cycle time and cloth life:

- Yarn fiber materials
- Yarn filament type
- Weave patterns
- Weight
- Permeability
- Cloth attachment
- Feed neck design
- Latex edge sealing



❖ Filter Cloth Materials

Polyab Safa offers you a wide array of woven and non-woven filter cloth fabrics to suit your particular operational needs . These include, but are not limited to:

- Felted Polypropylene Filter Cloth
- Polypropylene “Mono/Multi” Filter Cloth
- Polypropylene “Mono/Mono” Filter Cloth
- Polypropylene “Multi/Multi” Filter Cloth
- Polyester Filter Cloth
- Nylon Filter Cloth
- and more fabrics





❖ Polypropylene Cloth

Clothes made of polypropylene are used for acidic and gamma solutions and even for neutral solutions. This type of fabric can easily withstand temperatures up to $^{\circ} 110^{\circ} \text{C}$. Used in a wide range of solutions and industries, it has a good shelf life, is resistant to moisture and temperature, and also has good hygiene due to the lack of lint. It has better wash ability and is recyclable and the cake is easier to remove.

❖ Polyester Cloth

Polyester Clothes are also used for polymeric, acidic, and neutral solutions due to the polymer coating. The benefits of polypropylene fabrics, due to their thickness and soft material are better sealing conditions and high pressure tolerance and are produced in single and double layer types. Its two-layer type withstands up to 20 atmospheres of pressure.

❖ Polyamide Cloth

Polyamide (nylon) Cloth is also used for different environments and has a better structure and sealing.

❖ Cotton cloth

Cotton clothes are used for relatively high temperatures and in neutral and partially matched solutions. However, because of the presence of lint in areas where hygiene is more sensitive, such as medicinal applications, it is not used in the number of threads and wefts per unit area (square inches) and tissue conditions can be used at low pressures up to 5 atmospheres. This fabric is used when there are various reasons, for example, viscosity requires high pressure. A prominent feature of this clothes is its good absorption of the solution and easy sealing during filtration.

❖ **Find The Best Filter Press For you**

- **Whether you're looking to set up a new filter press and optimize your filter press, Poly Water Safa knows how to separate liquids from the solids you need for your specific planning.**
 - **Contact us so that we can gain the wide expertise of Polyab Safa to help you achieve your goals of fluid purification, cost savings and increased operational efficiency. It all starts with choosing the right filter press.**
- You can trust Polyab Safa Filter Press.**



Polyab Sefa

✉ NO14' ARISMAN BLDG' WEST BASIJ ST' JOMHOURI BLDV' RAJAEISHAHR AVE' KARAJ' IRAN

☎ +982634239802

☎ +989121024555

☎ +989129342100

www.filterpresscompany.ir

✉ poly.ab82@gmail.com

✉ info@tehranpolyethylene.ir

☎ +982189770025