



# HORIZONTAL TYPE FILTER PRESS

## Sparkler Zero Hold - Reverse Type

### Pressure Filtration



**FOR CHEMICALS, OIL, FOOD & BREWERY,  
PHARMACEUTICALS INDUSTRIES**



**EXPERT IN FILTRATION UNIT**



## SPARKLER FILTER PRESS

The **Akshar Engineering Works** offer a wide range of sparkler filter press in India consisting of stainless steel shells with bolted top cover. This feature helps the filter press to create and maintain its pressure. Several disc type filter plates are arranged horizontally in the filter cartridge assembly with perforated supporting screens, filter media and interlocking cups. The whole assembly shell stands on S.S. trolley and structured with pump and piping connection.

### WORKING PRINCIPLE

The main operation of sparkler filter press is to filter the impure liquid. Arriving on top of each horizontal plate with increasing pressure, the filter media holds back the impurities and allows the filter to pass through centre by interlocking cups, which takes the filtrate to the outlet of the filter. The cake formed between the horizontal plates can also be obtained. The function of filtration process becomes slow when the liquid reached its holding capacity into the cake.

## SPARKLER PRESSURE FILTER

18" x 23 PLATES  
6800 LPH





## ZERO HOLD UP FILTER PRESS

The **Akshar Engineering Works** – manufacturer and supplier of zero hold up filter press in India that is made up of high quality stainless steel having customized finished design. The cartridge assembly consists of plates, perforated screens, spacers and filter media stands on S.S. trolley. The whole assembly complete with attached pump and pipe lines through welding.

### WORKING PRINCIPLE

The zero hold up filter press having exactly the opposite direction of flow of liquid to the flow in standard filter. The unfiltered liquid is fed into central part of the machine giving high pressure from bottom inlet. The filter media filters the liquid when the whole liquid spreads out equally on each plate. Solids remain on filter media and filtrate liquid collects in the shell, which then comes out through the outlet. After the completing of filtration process the cake is cleaned from filter material and can be recycled.



**14" x 10 PLATES  
2000 LPH**



**8" x 6 PLATES  
400 LPH**

## TECHNICAL SPECIFICATIONS

DIA. OF PLATES (INCHES)	NO. OF PLATES -----	HEIGHT OF PLATES (MM)	FILTRATION AREA (Sq. Mtr.)	CAKE HOLDING CAPACITY		FLOW RATE ~ Ltrs/Hr.	SIZE OF PUMP -----	MOTOR HP
				SD*	RF^			
8	4	25	0.132	2.8	2.5	300	0.5"	1.0
8	6	25	0.198	4.3	3.9	400	0.5"	1.0
8	8	25	0.254	5.75	4.95	500	0.5"	1.0
14	4	38	0.378	10.4	12.9	750	1.0"	2.0
14	6	38	0.567	15.3	17.2	1000	1.0"	2.0
14	8	38	0.756	22.1	23.5	1500	1.0"	2.0
14	10	38	0.924	24.75	27.5	2000	1.0"	2.0
14	12	38	1.156	26.25	29.95	2300	1.0"	2.0
18	8	50	1.27	55.0	47.0	2500	1.5"	3.0
18	10	50	1.62	62.0	54.2	3200	1.5"	3.0
18	12	50	1.842	78	67.2	4000	1.5"	3.0
18	15	25	2.27	44.0	37.5	5000	1.5"	3.0
18	18	25	2.72	53.1	50.0	5500	1.5"	3.0
18	18	50	2.77	118	100	5500	1.5"	3.0
18	23	25	3.45	66	57	6800	1.5"	3.0
24	12	50	3.75	NA	110	6700	2.0"	5.0
24	15	50	4.21	NA	123	7800	2.0"	5.0
24	18	38	5.04	NA	130	9000	2.0"	5.0
24	23	38	6.34	NA	165	12500	2.0"	5.0
33	7	38	4.2	105	NA	8000	2.5"	7.5
33	10	38	5.6	150	NA	11000	2.5"	7.5
33	14	38	7.5	210	NA	15000	2.5"	7.5
33	23	38	14.0	380	NA	25000	2.5"	7.5

Filter comes with inlet, outlet, pressure gauge, bypass, air valve, centrifugal pump with mechanical seal & SS trolley.

**MAX. Working Pressure: 2 Kg/cm**

**MAX. Working Temperature: 100 - 200 C**

**NOTE: D=Deep Plate for High volume Cake Holding Capacity**

**S=Shallow Plate for small volume Cake Holding Capacity**





# FILTER PRESS



## SALIENT FEATURES FOR SPARKLER (PRESSURE) FILTER PRESS

- GMP Models stands for SS trolley.
- There are two types of filter plates are available – Deep and Shallow Plates.
- Manufactured using quality raw material such as S.S. 304/316/316L M.O.C.
- Having M.S./S.S. Double Jacket for hot filtration.
- Available in various sizes and different diameters having numerous number of plates.
- It also provides the Back wash facility for continuous operations.
- The horizontal filter plates prevent the cake dropping from the shell.

## SALIENT FEATURES FOR ZERO HOLD UP (REVERSE FLOW) FILTER PRESS

- Complete filtration process without any hold up of unfiltered liquid..
- The opposite direction of flow saves large time and cost.
- Single pass filtration with no solid bypass.
- Gives crystal filtration by filtering particles up to 1 micron size.
- Full batch recovery, no need of separate scavenging system.
- Proper sealing which allows filtration of toxic, hazardous and explosive liquids.
- Available with different diameters and numbers of plates.

## OPTIONAL FEATURES FOR SPARKLER & ZERO HOLD UP FILTER PRESS

- Flame Proof Motors & Starters.
- SS 304 Double Jacketed for Hot Filtration.
- Backwash facility for Zero Hold Filter Press to take no. of batches without opening the filter
- Centrifugal, Gear, Lobe, Alfa Laval Pumps for different liquid filtration.
- Sight Glass at the Top of filter tank to seeing the flow.
- Compounding Pressure Gauge, Air valve & Safety valve.
- PP, halar coating, PTFE, PVDF coating / lining can be done on Contact parts of liquid flow through filtration corrosive chemicals



**ZERO HOLD  
24" x 18 PLATES**

EXPERT IN FILTRATION UNIT



# ZERO HOLD UP FILTER PRESS

HORIZONTAL PLATE (REVERSE FLOW FILTER PRESS)  
PRESSURE FILTRATION

## SALIENT FEATURES FOR REVERSE FLOW ( ZERO HOLD) FILTER PRESS

### Central Feeding Ensures:

- No solid inside the filter tank.
- Complete recovery of liquids.
- Uniform distribution of cake on each plate.
- Uniform filter-aid bed can be formed.
- Cake solid can be maximum dried with N<sub>2</sub>.
- Complete cake retains over the plate.
- Reduce the cost of expensive solvents products.

### Closed System Ensures:

- Filtration of toxic, hazardous, explosive materials.
- Efficiently cleaned and sterilized.

### Plate Pack Arrangement Ensures:

- Any type of filtering media singularly or in combination, can be used to achieve required micron efficiency.
- Easy removal and cleaning of the cartridge assembly.

### APPLICATIONS:

Pharmaceutical, fine wine, alcohol, fine chemicals, perfumes, resins, food industries, distillery industries, paint, honey, varnish, sugar syrup etc....

The valves of "Flow Rates" mentioned in technical specifications have been estimated for the following operating parameters:

- a) Fluid : Water
- b) Insoluble : Carbon
- c) Filter Media : Non woven polypropylene cloth of 418 grade
- d) Carbon loading : 5kg/m<sup>2</sup> filtration area.

The actual flow-rate will differ from the estimated value depending on the operating variable.



## APPLICATION AREA

- Pharmaceutical Industries
- Chemical Industries
- Food Processing Industries
- Cement Industries
- Distillation Plants
- Oil Industries
- Dairy Industries
- Paint Industries
- Beverages

WINE FILTRATION



## SYRUP FILTRATION



## APPLICATIONS FOR SPARKLER ZERO FILTER PRESS

The Sparkler Filter Press is used in various industries such as pharmaceutical, chemical, beverages, food, cement and distillation plants. Following are the industries where the Sparkler Filter Press is used to filter the liquid slurry and produce the clean liquid.

### Pharmaceutical

This is the main industrial area of Sparkler Filter Press and it can filter out the foreign particles from the liquid slurry and make the liquid crystal clear. There are so many pharmaceutical industries in India and they produce pharma liquids in the form of solid liquid slurry.

### Chemical

To filter the chemical liquids, it is important to take care of temperature of filter press that is suitable for chemical. Make sure the quality remains same during filtration and at the end, you will get crystal clear liquid.

### Food & Beverage

Sparkler Filter Press is also used in food and beverage industries for the production of clean liquid food. The most food products are edible oils, juice, cold drinks, wine and many more.

### Distillation

In distillation plants, the sparkler filter press is one of the main components of whole plant. To produce the distillate water, the sparkler filter press used, as filter media and helps to produce the pure water at the end of distillation.

Pharmaceutical	Chemical	Food	Beverages	Paint
Antibiotics	Acetic Acid	Honey	Alcohol	Color
Antioxidants	Acetone	Lactose	Alcohol Extracts	Thinner
Cough Syrups	Acrylic Acid	Bake Oil	Beer	Varnish
Detergent	Fatty Acids	Beet Sugar	Milk	Paint Color
Dyes & Intermediates	Acrylonitrile	Bleaching Earth	Apple Juice	
Glyceride	Activated Carbon	Brine Solutions	Apple Wine	
Gasoline	Acetylene	Cacao Butter	Lime Juice	
Glycerin	Alkyd Polyester	Calcium Salts	Grape Juice	
Ink	Alkyd Resin	Cane Sugar	Guava Juice	

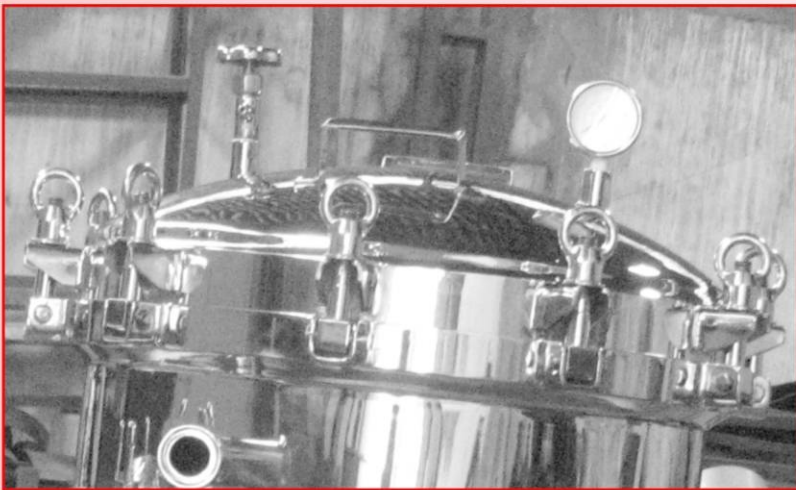
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- Dairy Industries
- Paint Industries
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# SPARKLER FILTER PRESS



[www.sparklersfilterpress.com](http://www.sparklersfilterpress.com)

SIZE



8"  
14"  
18"  
24"  
33"



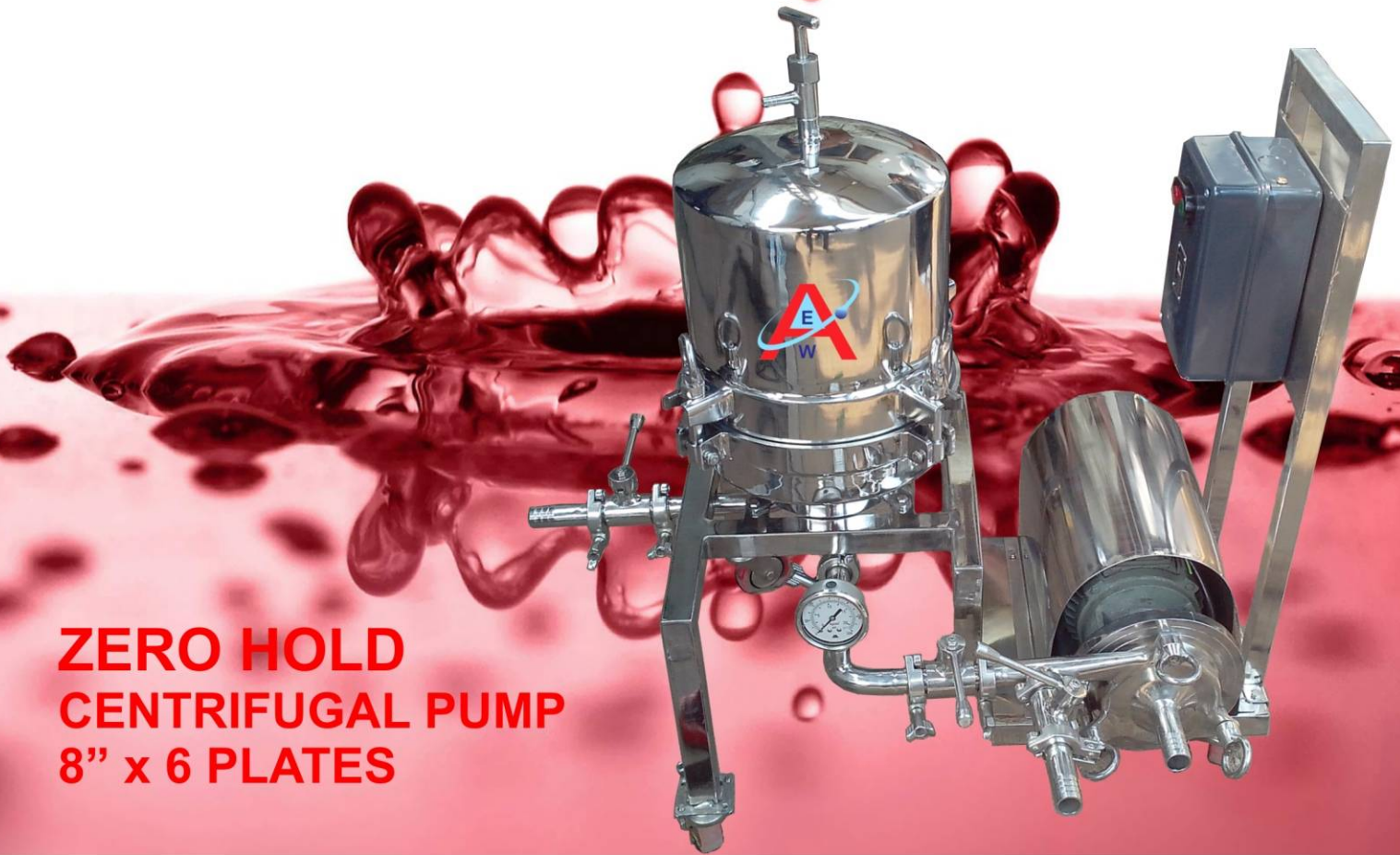




# AKSHAR FILTER PRESS



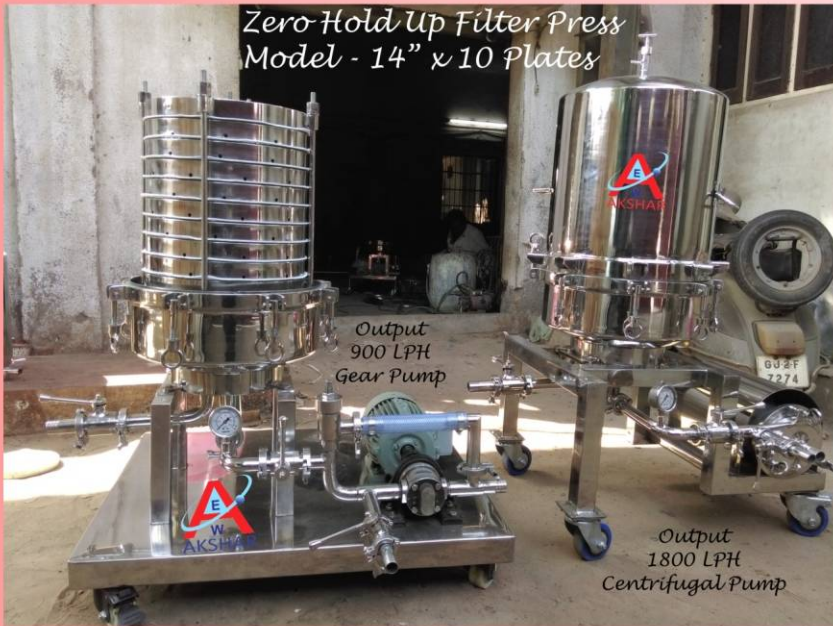
**ZERO HOLD  
GEAR PUMP  
8" x 6 PLATES**



**ZERO HOLD  
CENTRIFUGAL PUMP  
8" x 6 PLATES**

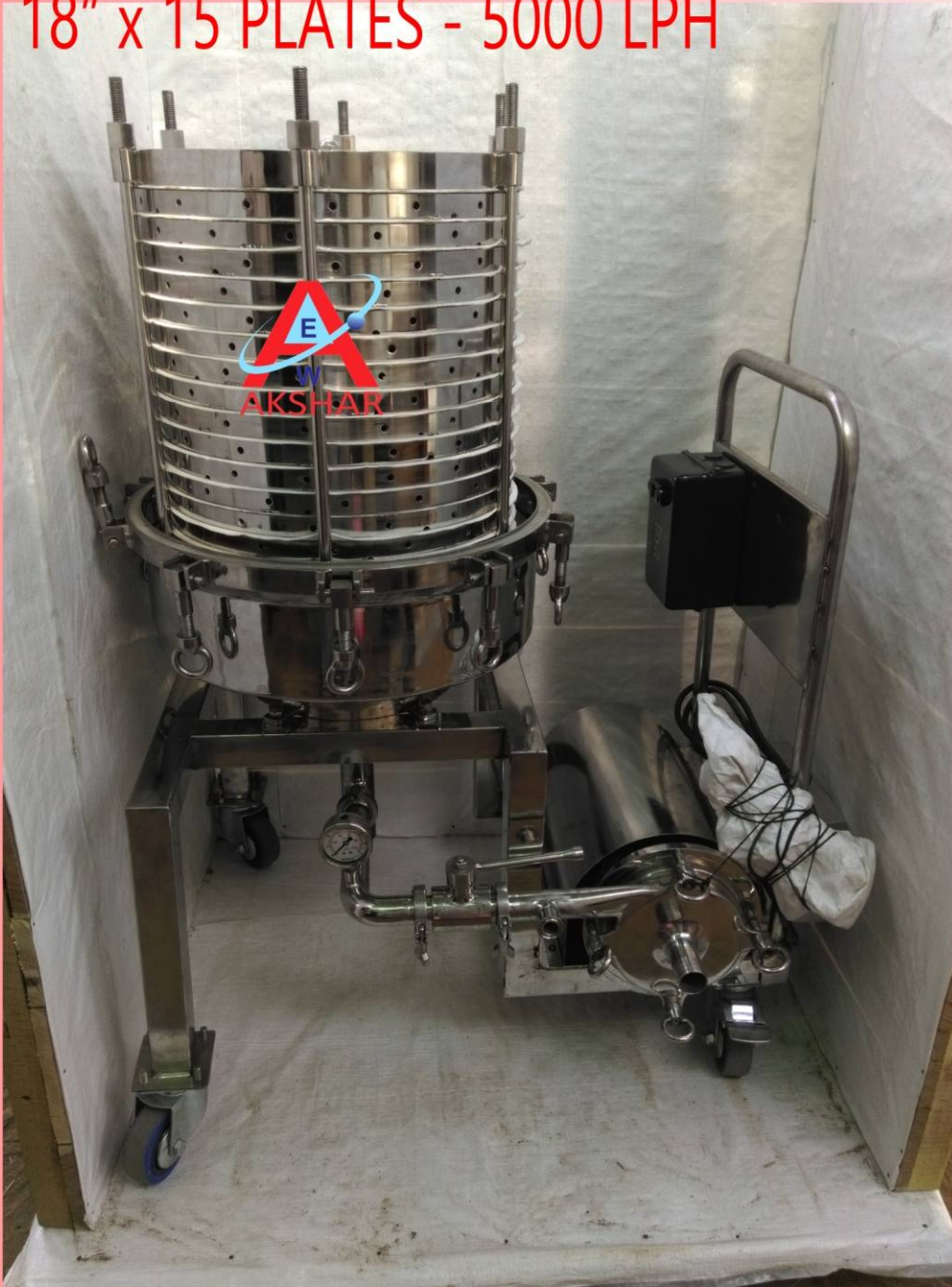


# ZERO HOLD UP FILTER PRESS



[www.zeroholdfilterpress.com](http://www.zeroholdfilterpress.com)

## 18" x 15 PLATES - 5000 LPH



[www.sparklertypefilterpress.net](http://www.sparklertypefilterpress.net)





[www.zeroholdfilterpress.com](http://www.zeroholdfilterpress.com)



**24" x 15 Plates 7800 LPH**





# “AKSHAR HOUSE”



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“AKSHAR HOUSE”

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