

# FILTER PRESS

## Filter Press Principle

Based on application, the high concentrated sludge flow is pumped into the plate partitioned filter chamber by high pressure diaphragm pump, dewatered by high pressure and process solidified sludge cake and clear filtered water.

### High Performance by High Pressure ...

In a filter press, the moisture content of the wetcake (the solids that stay behind in the chambers during filtration, form a cake which, because is wet in nature has been coined as wetcake) is directly proportional to the Filtration pressure that one can exercise in a given designed unit.

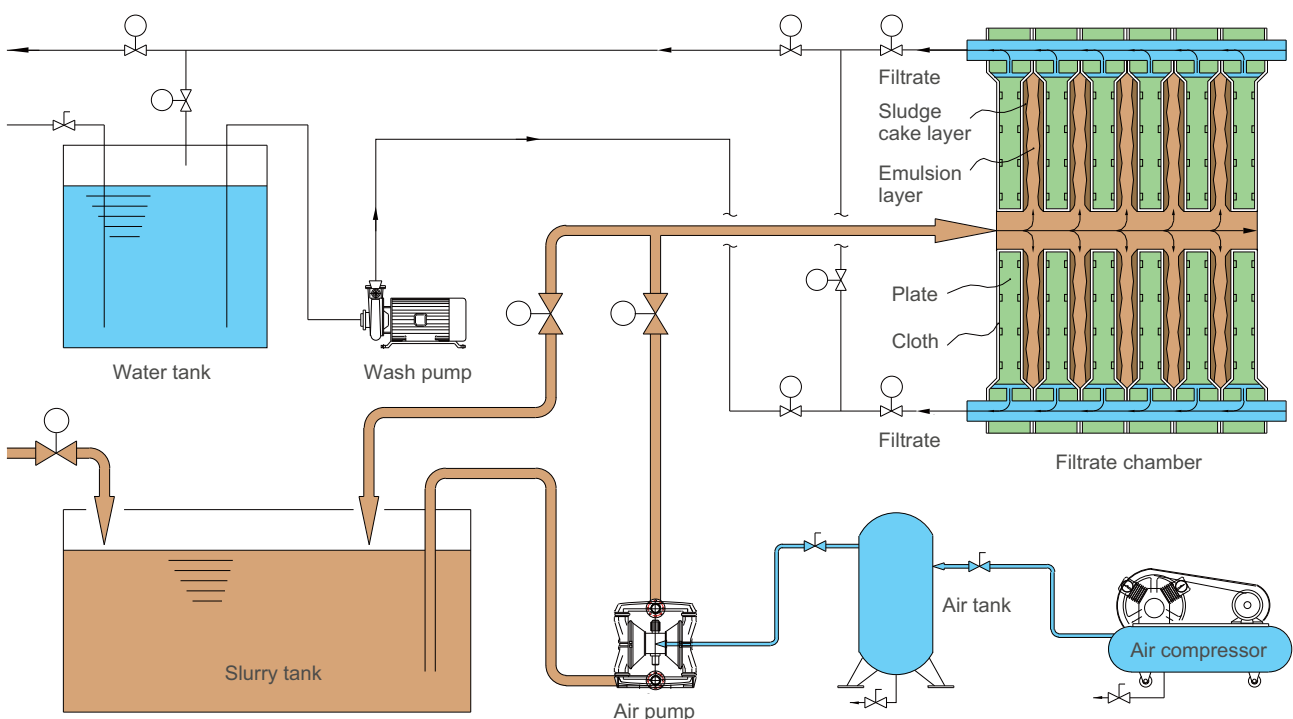
Now with Waterpower's innovative high pressure filter press design, YOU need not have to pay a very high premium for getting the ideal results that you required in your filter press.

In a conventional Filter Press, you must be getting 5 to 7 kgs. per square cms. of filtration pressure, which must be resulting in 50% to 75% moisture, depending upon your product and process properties. Now with Waterpower's HP Filter press, you can get filtration pressure upto 15 kgs. per square cms. and hence, a reduction in moisture content by 50% or more than your present day figures. Less moisture means:

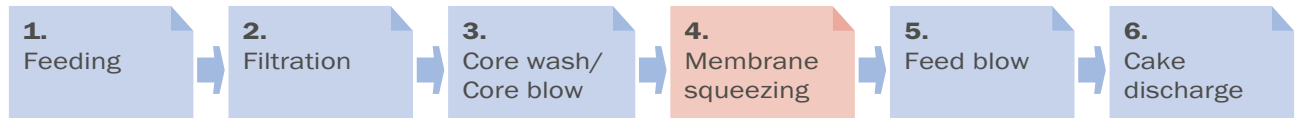
1. More Product YIELD per batch.
2. Less Handling LOSS.
3. Increased product quality.
4. Ease of handling and substantial SAVINGS on drying costs.



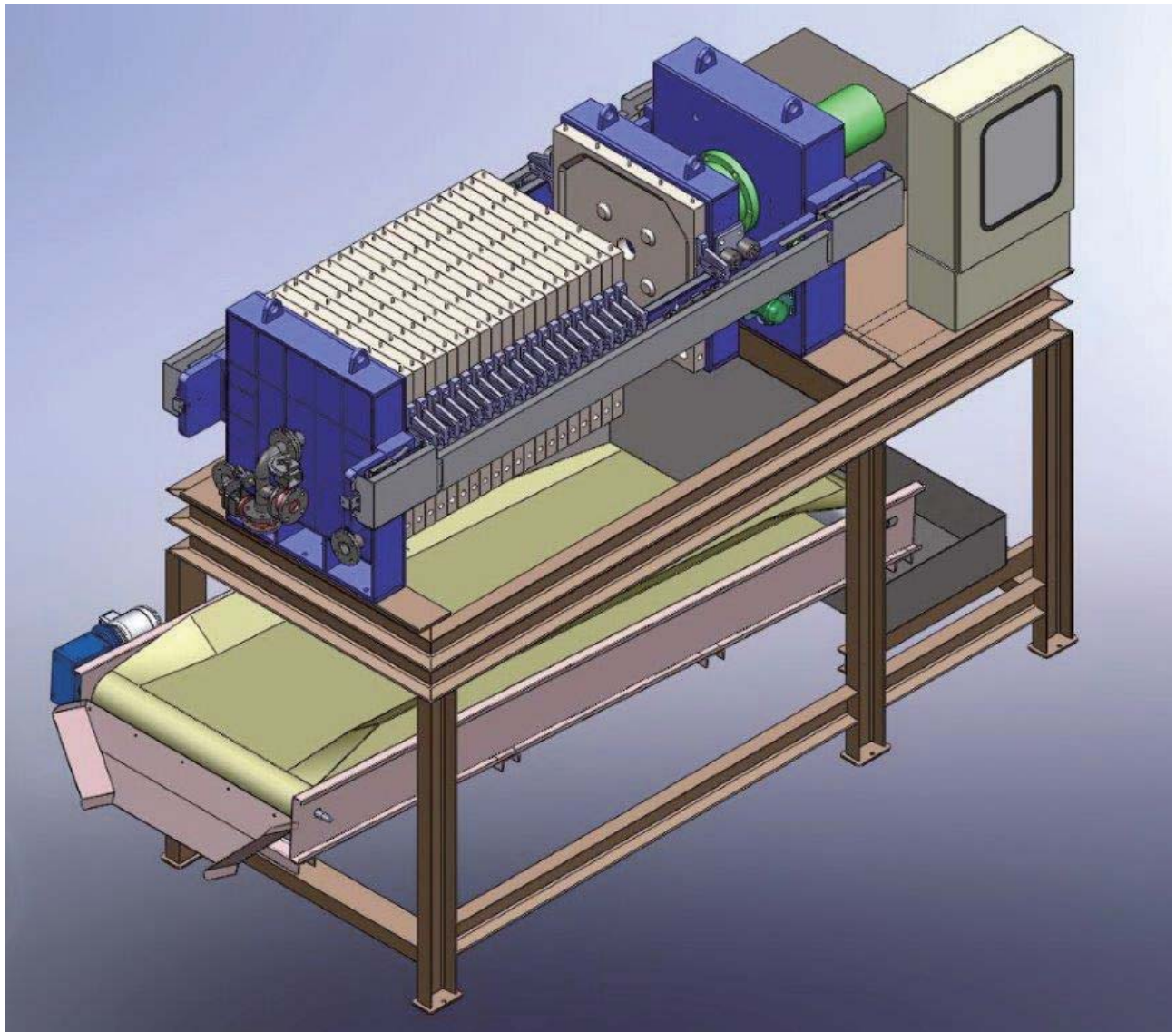
## Filter Press Process



### Filter Press Operation Procedure



### Filter Press Out view



Our company produces a complete product line of pressure-filtered dryers. According to the properties of the polluted sludge, field space, and customer's requirements, the most appropriate model can be chosen.

The opening methods of filter plates, collection of filtered liquid, sludge cake packaging, auxiliary material dropping system, and types of pressure filtering can also be integrated freely to meet the practical needs.



### Application

- 1 Chemical Industries: Medicine, Fertilizer, Dye, Graphite.
- 2 Food Industries: Sugars, Beer, Flour, Soybean Sauce, Beverage, Grease, Saccharine, Artificial Flavor etc.
- 3 Mining Industries Sand and stone pit, Marbles, Mount Morillonite, Bentonite, Calcium Carbonate, Amino Acid, White Smoke etc.
- 4 Metallurgic Industries, Non-iron Metallic Industries.
- 5 Wastewater Treatment and Sludge Dewatering.

### Filter Press Specification Table

Model	Filtrate area ( m <sup>2</sup> )	Plate size ( mm )	Plate thickness T ( mm )	Quantity N	Capacity ( Liter/cycle )	Hydraulic Pump ( HP )	Conveyor ( HP )
FP500	0.36×(N-1)	500	50	N	4.28×(N-1)	2	1/2
FP630	0.55×(N-1)	630	50	N	7.40×(N-1)	2	1/2
FP800	0.91×(N-1)	800	60	N	15×(N-1)	3	1
FP1000	1.56×(N-1)	1000	60	N	25×(N-1)	5	3
FP1250	2.80×(N-1)	1250	60	N	39×(N-1)	7.5	5

### Membrane Filter Press Specification Table

Model	Filtrate area ( m <sup>2</sup> )	Plate size ( mm )	Plate thickness T ( mm )	Quantity N	Capacity ( Liter/cycle )	Hydraulic Pump ( HP )	Conveyor ( HP )
FPM800	0.91×(N-1)	800x800	60	N	15×(N-1)	3	1
FPM1000	1.56×(N-1)	1000x1000	65	N	25×(N-1)	5	3
FPM1250	2.80×(N-1)	1250x1250	70	N	39×(N-1)	5	3
FPM1500	3.41×(N-1)	1500x1500	78	N	57×(N-1)	7.5	5
FPM2000	6.16×(N-1)	2000x2000	88	N	107.4×(N-1)	10	5

※Other special specifications is accepted