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# **Filter Press and Sintered Filters**

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# Filtration Equipments

1. Filter press
2. Meta filters
3. Filter leaf
4. Membrane filters
5. Filter candles
6. Sintered filters



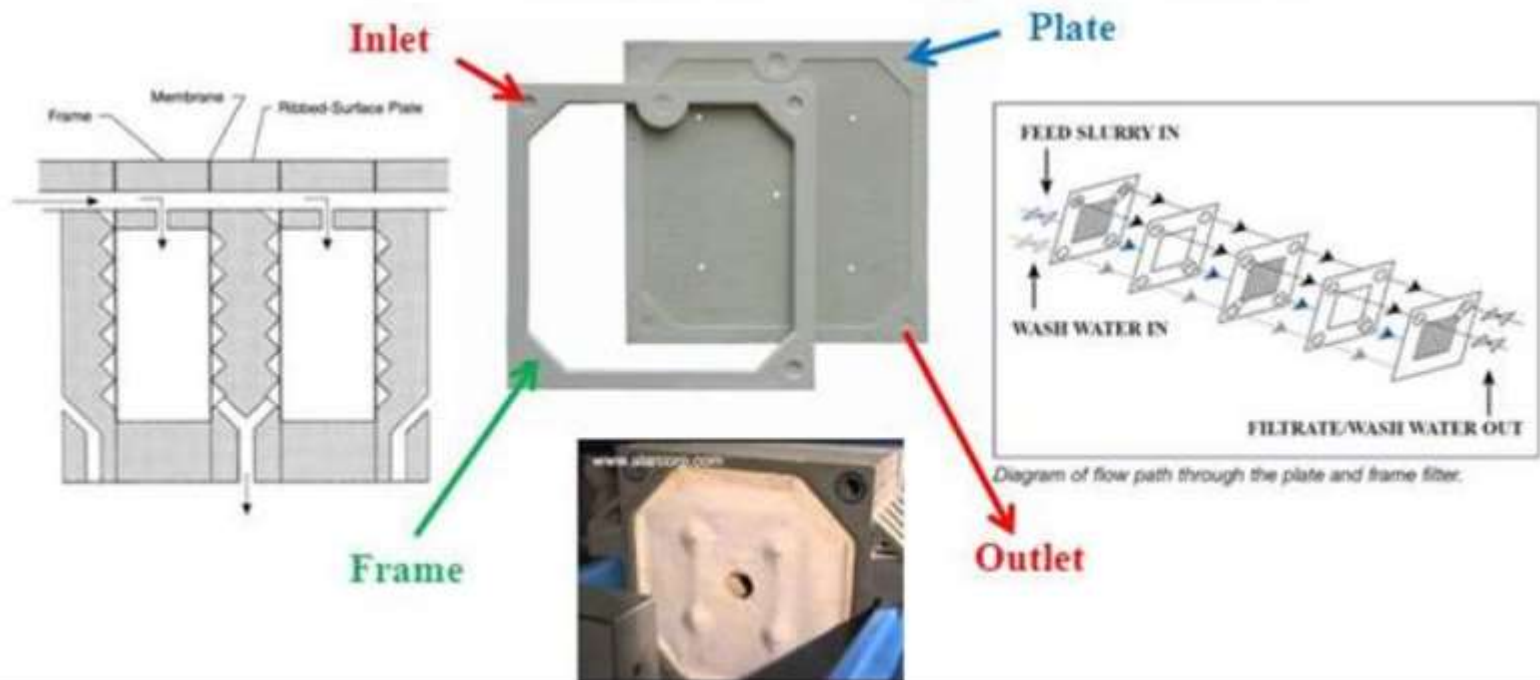
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## 1. FILTER PRESS

### Plate and Frame Filter Press

- It consists of **hollow frames** and **solid plates**.
- **Plates** have **grooved surface** to support the **filter cloth**.
- Filter cloth is fitted on each side of the plate.
- Plates and frames are placed **alternatively**.
- Each plate has an **outlet for filtrate**.
- Frames are opened **with an inlet** for the **liquid to be filtered**.





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### **Advantages:**

- Filtering media can be used **repeatedly**.
- Filter cloth can be **easily replaced**.
- Operation and maintenance is **easy**.
- It requires **less space**.
- Provides a **large surface area** for filtration.

### **Disadvantages:**

- It is **not a continuous process**
- The process **becomes costlier** because a **lot of labor is required** for washing and replacement of the filter cloth
- **Leakage between the plates** may take place
- Suitable when the **slurry contain less than 5% solids**.



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## 6. Sintered Filters

*Made of borosilicate glass*

1

- Borosilicate glass is finely powdered, Sieved and particle of desired size are separated

2

- Packed into disc mould and heated to a temperature adhesion takes place between particles

3

- The disc is then fused to a funnel of suitable shape and size





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Thank you

