Moving Clothes Type Filter Press

Feed inlet ➔ Fall cake ➔ Washing clothes = Only 40 min/cycle
A Moving clothes type filter press is a breakthrough of general filter press. It is a highly efficient, compact, dewatering device for separating solids from liquid slurries in the form of compressed cake. Its major components are a structured framework, filter chambers (formed by recess portion of Recessed plate system, or frames in plate and frame system), and filter cloth.

Filter press technology although very basic in nature, but its application is as important to the various processes it serves, as is a simple wheel to the motive machines. Filter Press are separation devices used for solid or liquid separation that work on feed pressure or squeeze pressure to reduce liquid content in process or waste slurries or to reduce solid content in a product.

The characteristics of the filter-clothes moving type dryer

1. Complete automatic operation
From the initiation, dewatering, and cleaning filter clothes to the release of sludge, all the above operate automatically. Batch operation and operating time can be set for everyday. The entire process is completely manpower-free. The dryer is suitable for 24-hour continuous operation, and can save the cost of investment.

2. Efficient dewatering to high dryness
By entry of mud at the top of the filter plates, a uniform distribution of entered sludge can be achieved. Each filter plate is equipped with a high-tension membrane. By applying uniform squeezing of the membrane, the sludge cake will reach high dryness at the shortest period of time.

3. Complete release of mud disks, no contaminations on filter clothes
Because of the filter-clothes moving design, even the sludge cake that are difficult to be released can be automatically removed with ease when the clothes are zigzagging.

4. Fast cleansing of filter clothes
Because of the moving filter-clothes design, the cleansing of filter clothes can be finished quickly within one minute. With such ease of operation, the filter clothes will be kept clean, and thus maintain a stable dewatering efficiency over the long term.

5. Extreme heavy duty cleaning for mud treatment
Since there is a drastic reduction of time needed for dewatering, sludge release and filter clothes cleansing, the capabilities of the dryer increase greatly. In other words, by utilizing a smaller size of dryer, a targeted amount can be promptly treated. Therefore, it will save the factory space and the area for facilities.

Operation Process Flow Chart
The principle of operation of the moving clothes type pressure-filtered dryer

1. Filter plates close
The pressure-filtered dryer initiates, and the hydraulic system then drives the hydraulic cylinders to close the filter plates. Airtight chambers are thus formed.

2. Feed sludge
The way to take in the sludge is to have the entry of sludge at the top of the chambers. The filtered liquid will be drained out through the filter clothes to achieve the goal of sludge dewatering.

3. Press to dewater
After the sludge is filtered, high-pressure water is used to expand the membrane for further squeezing the sludge cake. The moisture of the sludge cake will be lowered again.

4. Filter plates open
Following the return of the hydraulic cylinders, the filter plates are opened. Since the filter plates are connected by chains, all plates will be opened at the same time.

5. Release of sludge cake
Using the filter-clothes moving apparatus, all mud cakes can be released at the same time and the process will be finished within one minute.

6. Filter clothes cleansing
Every set of filter clothes is equipped with a cleansing nozzle. By utilizing the design of moving filter-clothes, the apparatus can finish cleansing at the same time.

Applicable applications
Food industry: Sugars, Beer, Flour, Soybean Sauce, Beverage, Grease, Saccharine, Artificial Flavor etc.
Chemical industry: Medicine, Fertilizer, Dye, Graphite.
Mining industry: Sand and stone pit, Marbles, Mount Morillonite, Bentonite, Calcium Carbonate, Amino Acid, White Smoke etc.
Others: Dyes, Resin, Metallurgic Industries, Non-iron Metallic Industries etc.
Polluted sludge in the sewer, industrial polluted sludge, and polluted sludge in the tap water etc.

Moving Clothes Filter Press Specification table

<table>
<thead>
<tr>
<th>Model</th>
<th>Filtrate area (m²)</th>
<th>Plate thickness T (mm)</th>
<th>Quantity N</th>
<th>Capacity (Liters/cycle)</th>
<th>Capacity (mm)</th>
<th>Machine Size LxWxH (mm)</th>
<th>Hydraulic Pump (HP)</th>
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<tr>
<td>FA500</td>
<td>0.36x(N-1)</td>
<td>80</td>
<td>N</td>
<td>4.28x(N-1)</td>
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<td>(Nx140+1635+N x85)x1180x1260</td>
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<td>FA800</td>
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<td>N</td>
<td>15x(N-1)</td>
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<td>(Nx160+1896+N x110)x1760x2025</td>
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<td>FA1000</td>
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<td>90</td>
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<td>42.6x(N-1)</td>
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<td>(NX190+3600+Nx135)x3300x3398</td>
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</table>

*Other special specifications is accepted*
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