

DEWATERING PROCESS MACHINE

BELT PRESS MACHINE



APPLICATION IN WASTE WATER SLUDGE TREATMENT

By:



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BMC BELT PRESS MACHINE

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OVERVIEW

Almost factory has Waste water treatment plant. During the process WWT plant have excess product as slurry from Chemical Treatment & Biological Treatment. Both of Slurry has collected in sludge holding and after that dewatering with BELT PRESS MACHINE by addition of cationic flocculent to form Sludge Cake.

The Belt Press Machine is designed for continuous and economical sludge de water, for large scale waste water treatment system, this belt press machine designed of high de water rate, automatic operation and used of small quantity of chemical.

Before the sludge is dehydrated, a certain flocculent are added and mixture is agitated forming the flock. The sludge is transferred to the sludge supply trough wherein No. 2 filter belt is upgraded so as to form a pool of the sludge. This pool plays a role to distribute the sludge with an even thickness on to the filter belt throughout its full width of effective filter belt.

At the primary dehydration zone, that is the Gravity Drainage Zone, mostly its gravity and the sludge No. 2 filter belt from a belt-like layer dehydrate the sludge.

The layer of the sludge on No. 2 filter belt then sandwiched in between No. 1 filter belt (upper belt) and No. 2 filter belts and is transferred to the press Zone. Wherein the sludge is dehydrated to its critical moisture contents by the pressure which increases continuously by tension of the filter belt (primary pressure zone) and by searing stress generated by travel of the filter belt (secondary pressure zone) and finally it becomes the dry cake.

The dry cake separates from the filter belt. The remaining cake is scrapped off by a scraper and discharged to the cake pit. Both No.1 and No.2 filter belts are cleaned by high-pressure water spray during the operation.

Filter water is collected together with cleaning water at the bottom of the equipment for discharge or reuse for cleaning the belt.

Benefits

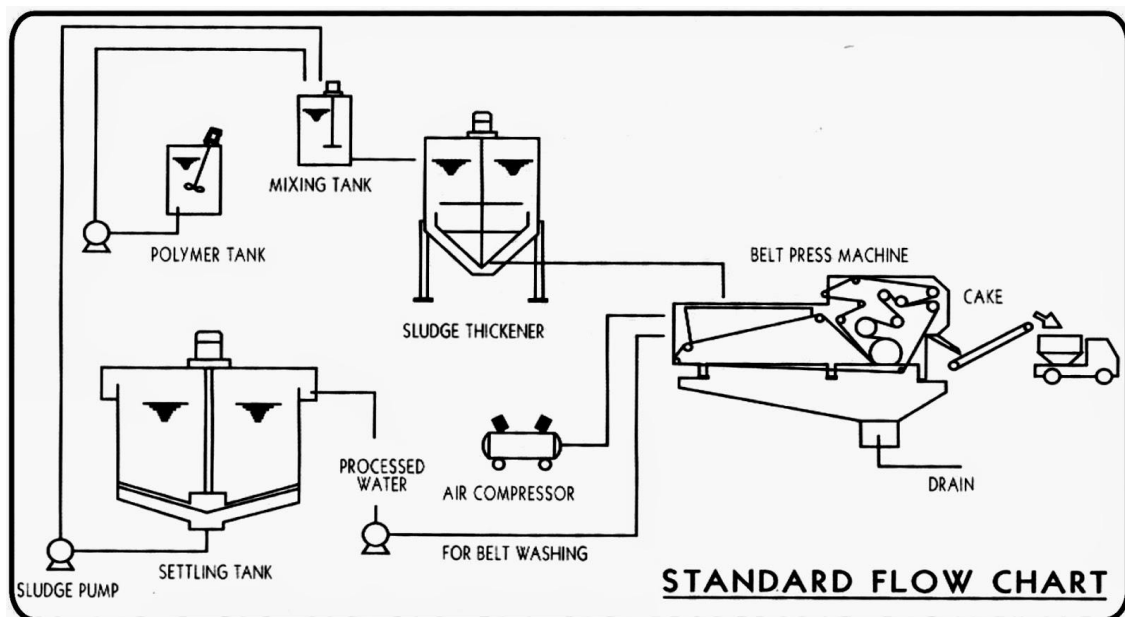
The BELT PRESS MACHINE offer the following key advantages:

- designed for high efficiency, continuous and economical slurry dewatering.
- design for low consume chemicals and high solid content in sludge form.
- designed less electricity and high drying ratio with easy operation and less maintenance.

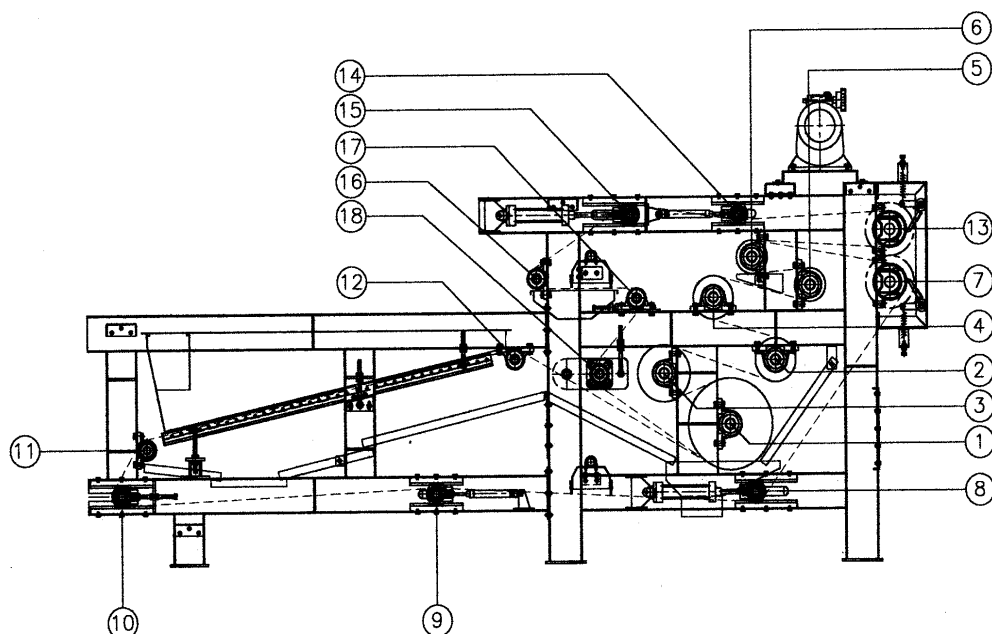
Application:

- **WASTE WATER TREATMENT PLANT**
- **WATER TREATMENT PLANT**
- **PAPER MILLS**

FLOW SHEET PROCESS DEWATERING:



DRAWING



Solid Content :

INPUT : Slurry (1 – 3,5% solid content)

OUTPUT : Sludge (25 - 40% solid content)

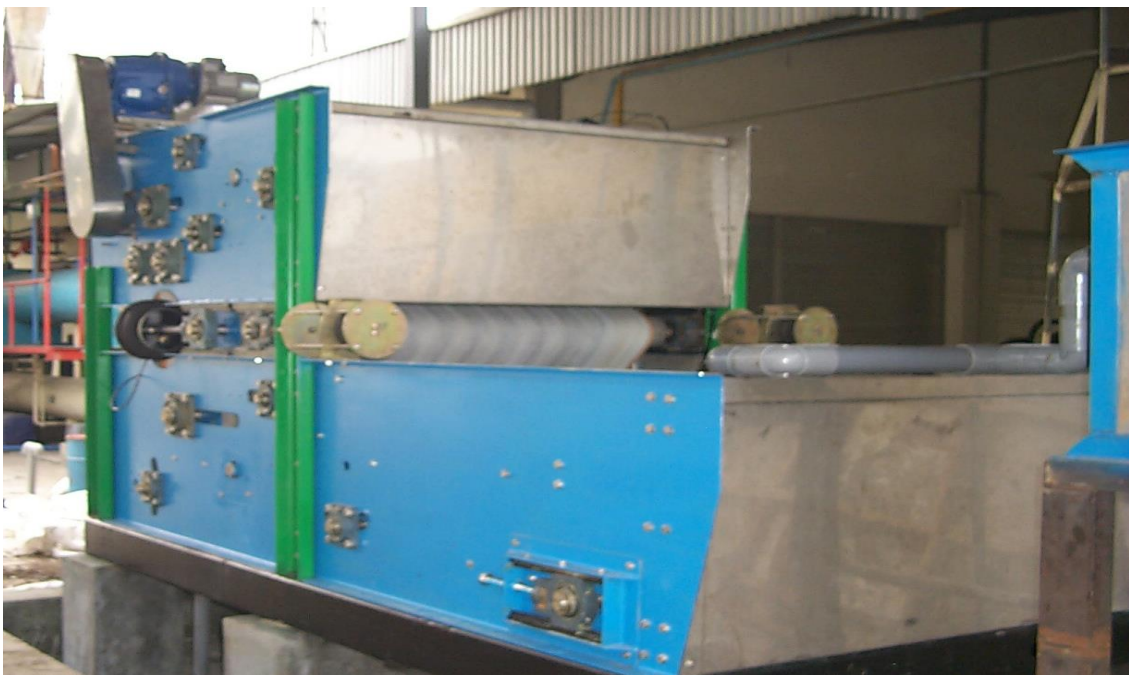
Specification:

No	Model	Belt Width (mm)	Capacity* (m ³ /hour)
1	BP S-06	600	1 - 2
2	BP S-08	800	2 - 3
3	BP X-10	1000	3 - 4
4	BP M-10	1100	4 - 5
5	BP M-12	1200	5 - 6
6	BP M-16	1600	7 - 8
7	BP M-20	2000	9-10

Reference List:



Belt Press Machine Type: BMC BP-M12



Belt Press Machine Type: BMC BP-X12



Belt Press Machine Type: BMC BP-S08



Belt Press Machine Type: BMC BP-M12



Belt Press Machine Type: BMC BP-M10A