



MULTIDESK SCREW PRESS



MORE INFO

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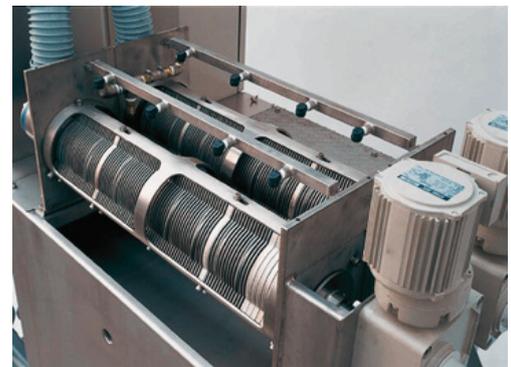
Website: www.ditant.com

DESCRIPTION

Multidesk Screw Press (MSP) is a type of mechanical press used primarily in industries like oil extraction, wastewater treatment, and dewatering processes. It operates by utilizing a screw mechanism to apply pressure and separate solid and liquid phases from a material, typically in continuous or batch processes.

Key features of an MSP:

- **Screw Mechanism:** A rotating screw applies pressure, expelling liquids from solids as materials move through a cylindrical chamber.
- **Multidesk Design:** Multiple pressing stages enhance efficiency by applying successive pressure for better solid-liquid separation.
- **Application:** Used in oil mills, wastewater treatment, and food processing for continuous, efficient separation.
- **Efficiency:** The multistage design ensures higher yield and lower energy use, while the screw provides gentle pressure to avoid material damage.
- **Compact and Versatile:** More compact than hydraulic presses, MSPs are suitable for various materials and industries.



SUPERIORITY

- 1** Small area requirement
- 2** Operation and maintenance is much smaller and easier, (spare parts are available locally)
- 3** Durability/longer tool life due to stainless steel tool construction & operating at low speeds
- 4** Electricity requirement is much smaller (1/20 of Centrifuge)
- 5** Operation and maintenance is much smaller and easier, The washer/washing water requirement is small (1/8 of the belt filter press)
- 6** Lower odor and noise buildup
- 7** Mud density is easy to decompose
- 8** Operate with touch screen (optional)

COMPARASION

Items	Multidisk Screw Press	Press Filter Press	Belt Press	Centrifuge
Ability to Process Low Concentration	Yes	Not Effective	Not Effective	Not Possible
No Need for Thickener	Yes	Not Effective	Not Effective	Not Effective
24-Hour Automatic Operation	Yes	Difficult	High Risk	High Risk
Space Requirement	Very Efficient	Fairly Efficient	Inefficient	Inefficient
Energy Consumption	Very Low	Low	Moderate	High
Labor Requirement	Very Low	Moderate	Moderate	High
Noise Level	Very Low	Low	Moderate	High
Maintenance	Low	Moderate	High	High
Operating Costs	Very Low	Low	High	High

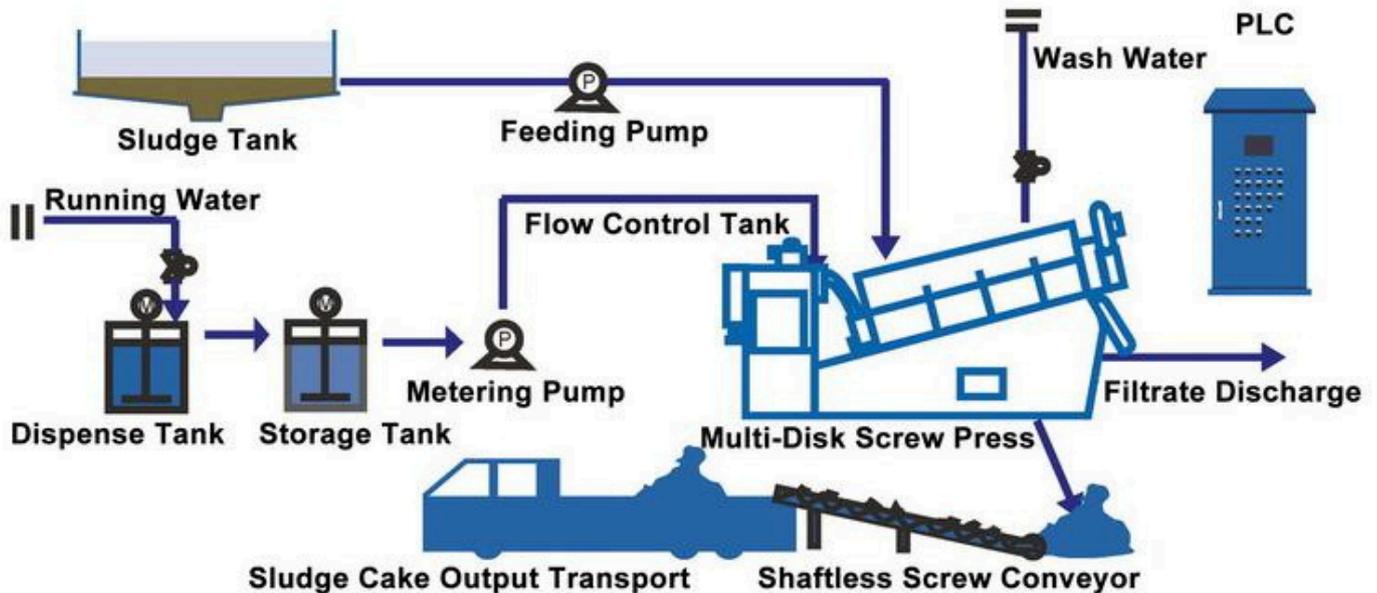
CAPACITY

Type	Slurry (Min m ³ /hour)	Slurry (Max m ³ /hour)	Dry Solid in Cake (Min kg/hour)	Dry Solid in Cake (Max kg/hour)
MSP-101	0.3	0.43	5	13
MSP-131	0.5	0.87	10	26
MSP-132	1.0	1.73	20	52
MSP-201	1.0	1.74	20	52
MSP-202	2.0	3.47	40	104
MSP-301	2.5	4.33	50	130
MSP-302	5.0	8.67	100	260
MSP-303	7.5	13.00	150	390
MSP-304	10.0	17.30	200	520
MSP-352	10.0	17.30	200	520
MSP-353	15.0	26.00	300	780
MSP-354	20.0	35.00	400	1040
MSP-402	17.5	29.5	340	884
MSP-403	25.5	44.20	510	1326

SPECIFICATION

Model	Cylinder Specification (mm)	Sludge Cake Outlet Distance (mm)	Machine Specifications (mm)	Net Weight (kg)	Running Weight (kg)	Power (kW)	Rinsing Water (L/h)
MSP 101	Ø 100 x 1	215	Length: 1816 Width: 756 Height: 1040	200	290	0.2	24
MSP 131	Ø 130 x 1	250	Length: 1969 Width: 756 Height: 1040	220	315	0.3	24
MSP 132	Ø 130 x 2	250	Length: 2069 Width: 910 Height: 1040	305	450	0.3	48
MSP 201	Ø 200 x 1	125	Length: 2500 Width: 500 Height: 1200	260	365	0.6	32
MSP 202	Ø 200 x 2	350	Length: 2500 Width: 935 Height: 1270	520	730	0.8	64
MSP 301	Ø 300 x 1	495	Length: 3255 Width: 985 Height: 1600	910	1320	0.8	40
MSP 302	Ø 300 x 2	495	Length: 3455 Width: 1295 Height: 1600	1530	2230	1.2	80
MSP 303	Ø 300 x 3	495	Length: 3605 Width: 1690 Height: 1600	2090	3080	1.95	120
MSP 304	Ø 300 x 4	495	Length: 3755 Width: 2000 Height: 1600	2710	3990	2.75	160
MSP 352	Ø 350 x 2	585	Length: 4140 Width: 1550 Height: 2250	2450	3400	3.75	144
MSP 353	Ø 350 x 3	585	Length: 4420 Width: 2100 Height: 2250	3350	4850	6.0	216
MSP 354	Ø 350 x 4	585	Length: 4725 Width: 3120 Height: 2250	5600	7560	8.2	288
MSP 402	Ø 400 x 2	759	Length: 5037 Width: 1673 Height: 2400	3090	5040	5.2	200
MSP 403	Ø 400 x 3	759	Length: 5037 Width: 2240 Height: 2400	4380	6800	6.7	300

FLOW SCHEME



1 Sludge from the sludge holding tank is pumped into the flocculation unit for the flocculation process. Simultaneously, a flocculant solution is also injected into the flocculator unit. The flocculation process occurs in this unit, causing the sludge and water to separate and form clumps.

2 The result of the flocculation process will flow by gravity into the screw press unit.

3 The screw press, with an overlapping circular motion, moves the sludge toward the end of the screw where the shaft widens, allowing the sludge to be compressed and squeezed.

4 The water resulting from the flocculation process and the pressing will exit through the slots of the screw press cylinder and be returned to the WWTP system.

5 The dried sludge will exit at the end of the screw press through the end plate and be collected in the sludge cake storage.

FULL PRODUCT



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