TSM

(Three Save Mechanism)

Save Laborcost

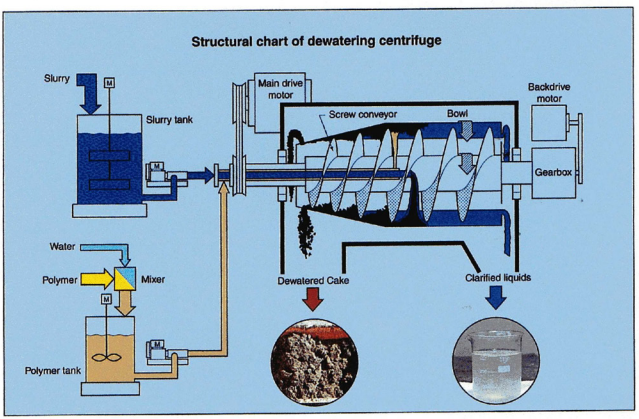
Save Resources

Save Energy

Mechanism of dewatering

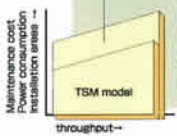
Slurry, which has been fed into the bowl through the feed tude, is separated and dewatered due to centrifugal force generated by rotation and due to efficient flocculation of sludge particles by means of a unique polymer dosage system of our company.

Clarified liquids, which are thus separated, flow over the dam and are discharged out of the effluent discharge port, and solids, which are slowly conveyed by the screw conveyor to the solids discharge port, are discharged out of the solids discharge port as dewatered cake.



Basic Design Concept is to Save Labor, Energy and Resources. That is why TSMs are playing major roles in production systems and wastewater treatment plants.

TSM models have a novel dewatering zone and an expanded separation zone. TSM models surpass the conventional centrifuges of similar bowl dimensions in dewatering and treatment capacities. Their high flocculation efficiency reduces dosage of flocculant further. Energy consumption is remarkably small, compared by the conventional models. Our uniquely developed tiles on the edge of the screw conveyor blade not only enhance durability but also reduce maintenance cost remarkably. TSM models are high performance standard models which bring manybenefits. Therefore, they are used in various areas such as water/sewage works, industrial effluent and solid-liquid separation in the production processes.



■Horizontal TSM

Model	Centrifugal force (G)	Main motor (kW)	Back drive motor (kW)	Weight (kg)	Dimension (mm)		
					Length	Width	Height
TSM 002	2,100	2.2	0.75	290	1,140	620	560
TSM 004	2,100	2.2	1.5	480	1,260	950	820
TSM 006	2,100	3.7	2.2	550	1,390	1,050	740
TSM 010	2,100	5.5	2.2	620	1,610	1,100	730
TSM 020	2,100	7.5	2.2	1,190	1,950	1,380	880
TSM 030	2,100	11	2.2	1,360	2,320	1,350	900

■Horizontal TSM

Model	Centrifugal force (G)	Main motor (kW)	Back drive motor (kW)	Weight (kg)	Dimension (mm)		
					Length	Width	Height
TSM 040	2,100	15	3.7	1,650	2,440	1,510	900
TSM 043	2,100	18.5	3.7	1,820	2,760	1,800	990
TSM 050	2,100	30	5.5	2,500	2,950	2,200	1,120
TSM 053	2,100	30	5.5	3,000	3,300	2,250	1,120
TSM 055	2,100	37	7.5	3,550	4,000	2,250	1,200
TSM 056	2,100	37	7.5	3,840	4,450	2,250	1,200
TSM 060	2,100	45	7.5	4,200	4,150	2,250	1,280
TSM 063	2,100	55	7.5	4,800	4,750	2,500	1,280
TSM 070	2,100	55	11	5,100	4,600	2,900	1,300
TSM 073	2,100	75	15	7,500	5,200	3,100	1,300
TSM 074	2,100	75	15	7,800	5,500	3,100	1,300
TSM 075	2,100	75	15	7,800	5,000	3,400	1,300
TSM 080	2,100	90	18.5	9,500	5,900	3,500	1,600
TSM 085	2,100	132	22	14,400	6,400	3,500	1,700
TSM 090	2,100	180	30	15,400	7,000	4,200	1,800
TSM 095	2,100	220	37	21,500	8,000	4,400	2,300
TSM 100	2,100	280	45	34,800	8,700	4,500	2,400

※TSM-02○ through TSM-100○ are also available.

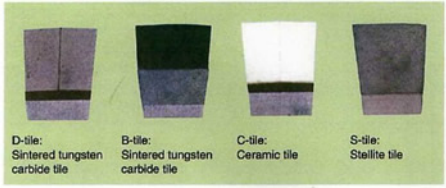
Tile conveyor

The most important factor in selecting dewatering centrifuge is specifications of abrasion-resistant parts of a screw conveyor.
Tiles, which were developed on its own at Tomoe Engineering Co., Ltd. , have been adopted for screw conveyor edge, in which their excellent durability has been proved and their replacement on site has been made possible.

Features of the tile are as follows:

☐ Excellent abrasion resistance

Abrasion resistance is excellent, because high purity sintered tungsten carbide is used for the tile tips. Tomoe Engineering Co., Ltd. is capable of coping with various requirements of customers by developing tiles whose specifications have been diversified so as to meet their specific applications.



D-tile:
Sintered tungsten carbide tile

B-tile:
Sintered tungsten carbide tile

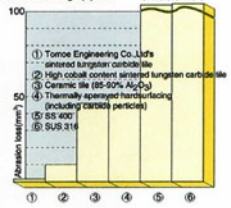
C-tile:
Ceramic tile

S-tile:
Stellite tile

☐ Easy replacement on site

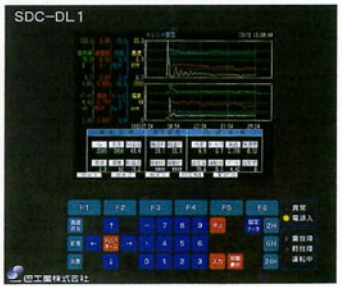
Tiles can be easily replaced on site, because a back up plate system without welding distortion when attaching tiles has been adopted.

Relationship between wear-resistant material and abrasion loss with an abrasion testing equipment



Dewatering centrifuge monitor (optional)

Dewatering centrifuges are easy to operate and maintain in general. But Tomoe Engineering Co., Ltd. has developed a dewatering centrifuge monitor to make them easier.



Features of the monitor are as follows:

☐ Multifunction

Color crystal display for grasping ta a glance operating and processing conditions of the centrifuge, with device for recording relevant parameters attached as required

☐ Small size and easy installation

Capable of being installed within an existing control panel on site while serving as a central monitor at a small treatment plant as required