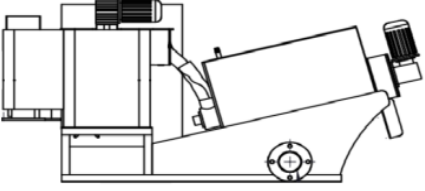
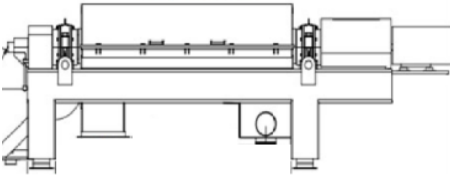


## Comparison Between Micro Global Dewatering and Centrifuge Decanter

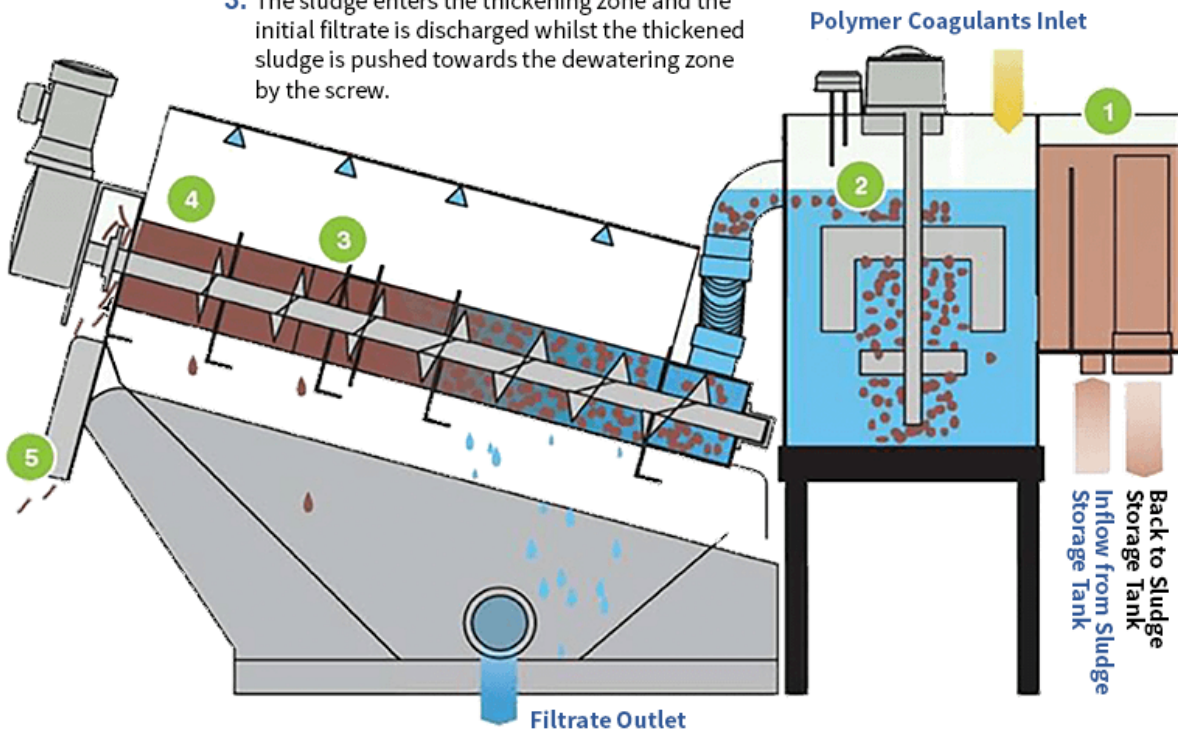
ANALYSIS	MICRO GLOBAL DEWATERING MACHINE	CENTRIFUGE DECANTER
		
CAPEX	Approx 10% less than centrifuge in all make	Approx 11% more than screw press in all make
CAPACITY @ 1% SOLIDS	1 Cubic metre per hour	1 cubic metre per hour
POLYELECTROLYTE CONSUMPTION 1% W/W	3.5 kg per ton of dry solid	3 kg per ton of dry solid
COST OF POLYELECTROLYTE @330 /KG	11.55 Rs/Hr (35 gram poly per hour)	9.9 Rs/Hr (30 gram poly per hour)
ELECTRICITY CONSUMPTION	0.37 KW	22 KW
COST OF ELECTRICITY @ RS 7/UNIT	Rs 2.59/Hr	Rs 154/Hr
TOTAL RUNING COST	Rs 14.14/Hr	Rs 163.9/Hr
NOISE LEVEL	Less than 70 dB	More than 90 dB
MAINTENANCE	LOW & EASY	HIGH & TOUGH
INSTALLATION & OPERATION SETUP	SIMPLE	COMPLEX
LIFE CYCLE COST	VERY LOW	VERY HIGH
CAKE ODOUR	LOW	HIGH
ROTATIONAL SPEED	3-6 RPM	> 2000 RPM
OPERATION ON LOW CONCENTRATION SLURRY	YES	NO

RINSING WATER COMSUMPTION	LOW	HIGHER CONSUMPTION OF RINSING WATER
MOISTURE IN OUTLET SLUDGE	<80 %	<80 %

## SLUDGE DEWATERING MACHINE

1. Feeds a fixed amount of sludge to the flocculation tank whilst the excess sludge overflows to site drainage.
2. A Polymer is mixed with the sludge to form flocks suitable for the multi plate screw press.

3. The sludge enters the thickening zone and the initial filtrate is discharged whilst the thickened sludge is pushed towards the dewatering zone by the screw.



4. In this section, the gaps between the rings and the screw pitch decrease gradually in the direction of the end plate, whilst the pressure of the filter element increases due to the volume compression effect, which thickens and dewateres the sludge.
5. The end plate creates further pressure from the outlet side so that the sludge becomes drier, resulting in up to 35% solid sludge cake which is released from the sludge cake outlet.