

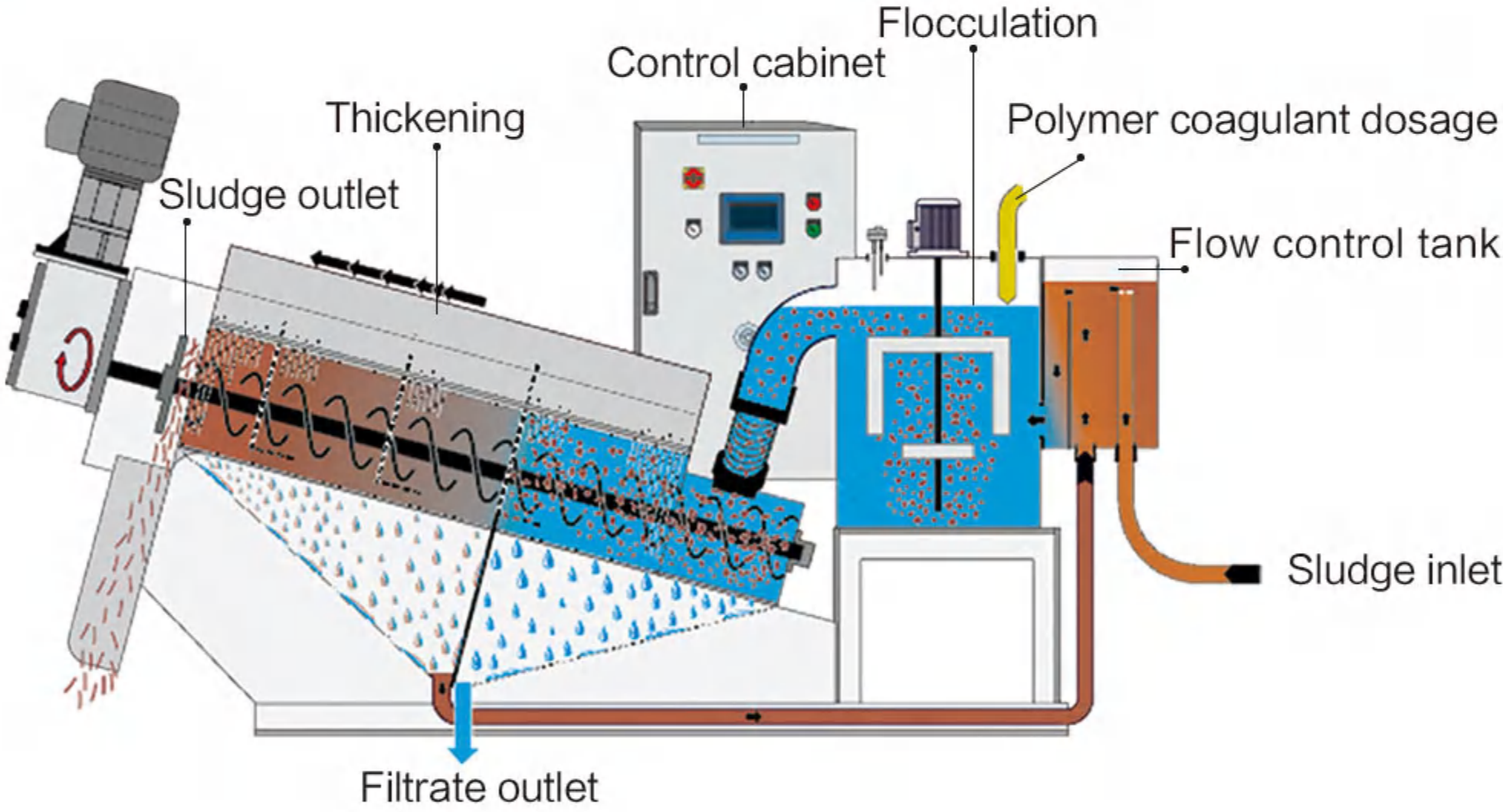
Multi-plate Screw Press

YAE

Multi-plate Screw Press follows the principles of force water in the same direction, thin layer dewatering, appropriate pressure application, and extended dewatering path, solving the technical problems of previous generations of sludge dewatering equipment such as easy blockage, inability to process low concentration and oily sludge, high energy consumption, and complex operation. It achieves efficient flocculation and continuously completes sludge concentration and pressing dewatering work, ultimately returning or discharging the collected filtrate.



Structure and Operation Principle



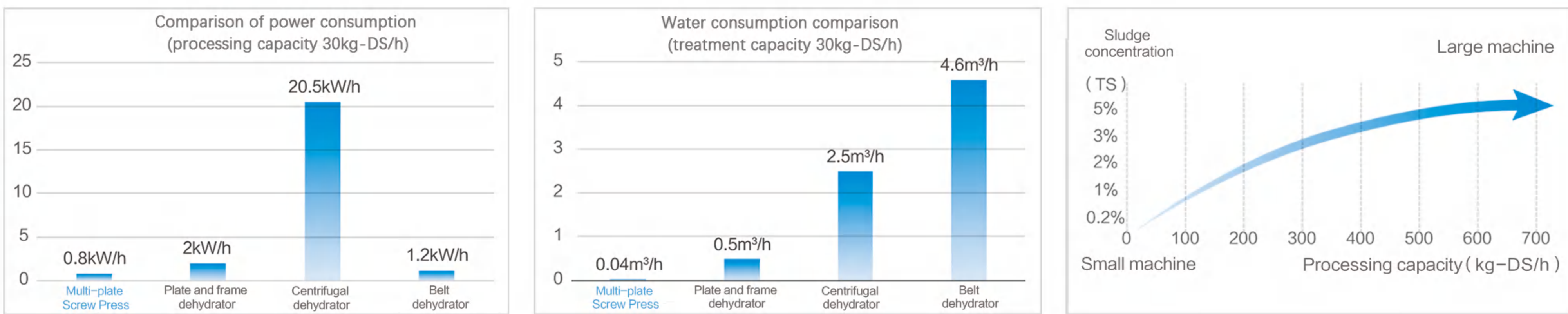
Multi-plate Screw Press integrated with an auto control cabinet, flocculation and conditioning tank, sludge thickening & dewatering body, and a liquid collection tank.

The body of screw press is filtering device composed of multiple fixed rings and moving rings, in which the screw shaft passes through.

After gravity concentration in the concentration section, the sludge is transported to the dehydration section. In the process of moving forward, with the gradual reduction of the filter joint and pitch and the blocking effect of the back pressure plate, great internal pressure is generated and the volume is continuously reduced, so as to achieve the purpose of dehydration.

Advantages

- **Direct treatment of thin sludge**
Multi-Plate Screw Press is capable of dewatering low-concentrated sludge from a biological process, such as an oxidation ditch, which decreases phosphorus in return water from sludge treatment.
- **Stress-free maintenance**
Self-cleaning, prevents clogs.
- **Low operational cost**
Low-speed rotation, uses less electricity, and 1/115 the water of belt dehydrators.
- **24-hour automated operation**
Multi-Plate Screw Press with its clog-free design operates fully automatic for 24 hours and it only requires periodic inspection and chemical replenishment.
- **Clog-free construction**
Built-in self-cleaning system handles oily sludge without clogging and requires no rinsing water to prevent clogging.



Application

Multi-plate screw press is suitable for municipal sewage, tap water, industrial waste water, food, beverages, livestock, chemical, machinery manufacturing, metal processing, petroleum, printing and dyeing, washing, paper making, and other industries.

Model Reference

Model	Dry Solids Capacity (kg-DS/h)	Sludge Treatment Capacity (m³/h)				
	Low-High concentration	10000mg/L	20000mg/L	30000mg/L	40000mg/L	50000mg/L
YAE-101	3~7kg/h	~0.3m³/h	~0.25m³/h	~0.2m³/h	~0.15m³/h	~0.14m³/h
YAE-131	6~14kg/h	~0.6m³/h	~0.5m³/h	~0.4m³/h	~0.3m³/h	~0.28m³/h
YAE-132	12~28kg/h	~1.2m³/h	~1m³/h	~0.8m³/h	~0.6m³/h	~0.56m³/h
YAE-201	12~20kg/h	~1.2m³/h	~0.75m³/h	~0.6m³/h	~0.5m³/h	~0.4m³/h
YAE-202	24~40kg/h	~2.4m³/h	~1.5m³/h	~1.2m³/h	~1m³/h	~0.8m³/h
YAE-203	36~60kg/h	~3.6m³/h	~2.25m³/h	~1.8m³/h	~1.5m³/h	~1.2m³/h
YAE-301	30~70kg/h	~3m³/h	~2.5m³/h	~2m³/h	~1.5m³/h	~1.4m³/h
YAE-302	60~140kg/h	~6m³/h	~5m³/h	~4m³/h	~3m³/h	~2.8m³/h
YAE-303	90~210kg/h	~9m³/h	~7.5m³/h	~6m³/h	~4.5m³/h	~4.2m³/h
YAE-304	120~280kg/h	~12m³/h	~10m³/h	~8m³/h	~6m³/h	~5.6m³/h
YAE-351	60~120kg/h	~6m³/h	~5m³/h	~4m³/h	~3m³/h	~2.4m³/h
YAE-352	120~240kg/h	~12m³/h	~10m³/h	~8m³/h	~6m³/h	~4.8m³/h
YAE-353	180~360kg/h	~18m³/h	~15m³/h	~12m³/h	~9m³/h	~7.2m³/h
YAE-354	240~480kg/h	~24m³/h	~20m³/h	~16m³/h	~13m³/h	~9.6m³/h
YAE-401	100~160kg/h	~10m³/h	~6.5m³/h	~5m³/h	~4m³/h	~3.2m³/h
YAE-402	200~320kg/h	~20m³/h	~13m³/h	~10m³/h	~8m³/h	~6.4m³/h
YAE-403	300~480kg/h	~30m³/h	~19.5m³/h	~15m³/h	~12m³/h	~9.6m³/h
YAE-404	400~640kg/h	~40m³/h	~26m³/h	~20m³/h	~16m³/h	~12.8m³/h
YAE-501	140~260kg/h	~14m³/h	~12m³/h	~10m³/h	~8m³/h	~5.2m³/h
YAE-502	240~520kg/h	~28m³/h	~24m³/h	~20m³/h	~16m³/h	~10.4m³/h
YAE-503	420~780kg/h	~42m³/h	~36m³/h	~30m³/h	~24m³/h	~15.6m³/h
YAE-504	560~1040kg/h	~56m³/h	~48m³/h	~40m³/h	~32m³/h	~20.8m³/h
YAE-506	840~1560kg/h	~84m³/h	~72m³/h	~60m³/h	~48m³/h	~31.2m³/h

* Sludge treatment capacity=DS standard throughput- Sludge concentration