

EQUIPMENT



SCREW PRESS DEHYDRATOR

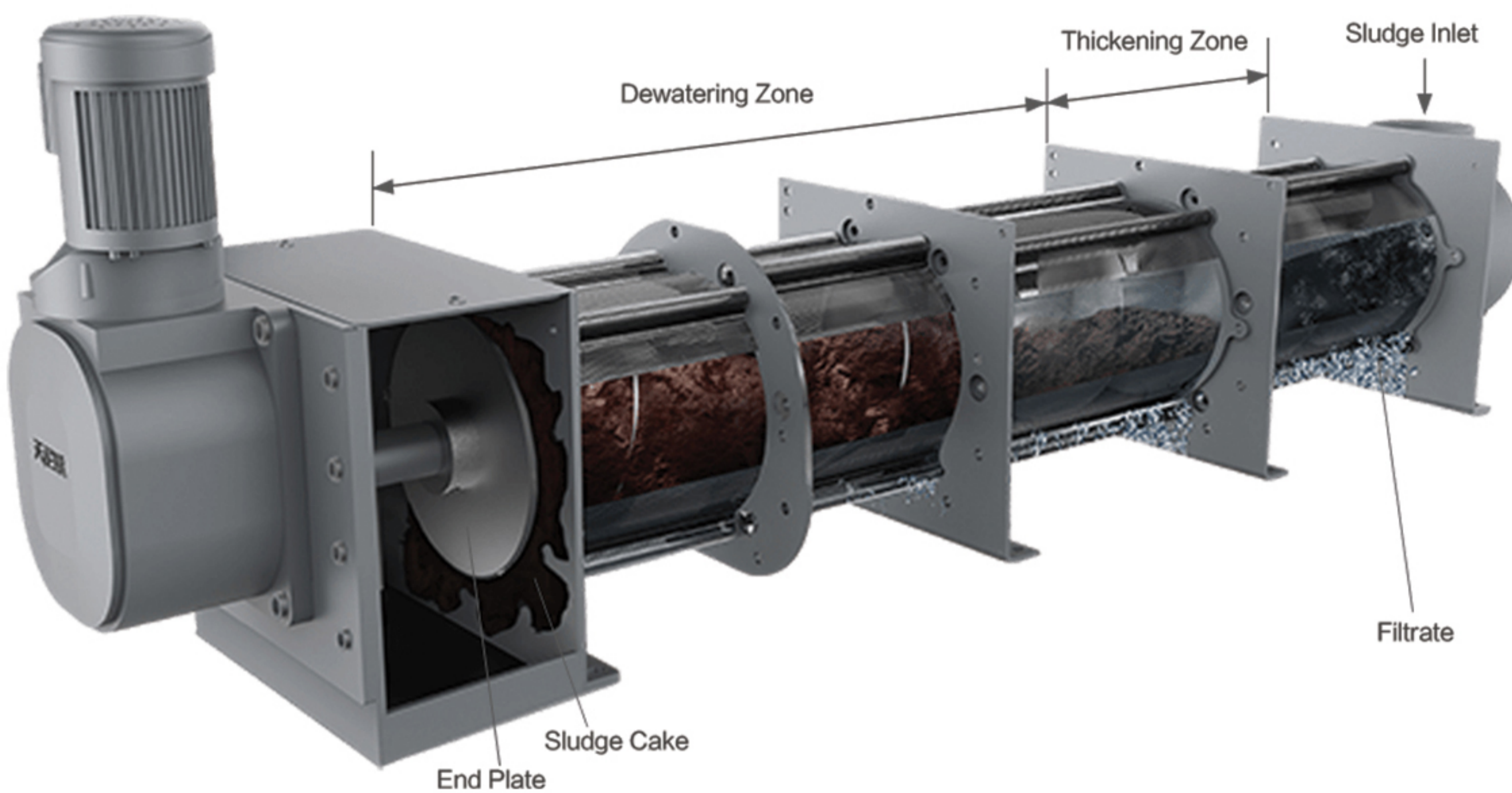
SCREW PRESS DEHYDRATOR

- **High Dewatering Efficiency:** Handles low-concentration sludge (0.2–5.0% solids) with stable performance and high capture rates. Integrated pre-thickening enhances gravity concentration and optimizes dewatering.
- **Self-Cleaning, No Clogging:** Alternating moving and fixed rings eliminate filter cloths and prevent clogging. The automatic spray system keeps the unit clean and maintains continuous operation, even for oily sludge.
- **Low Energy, Low Noise:** Low-speed screw design (0.2–3 rpm) ensures quiet, energy-efficient operation—ideal for municipal and industrial use.
- **Minimal Water Usage:** Consumes up to 90% less wash water than traditional belt presses. Smart spray control activates only when needed, reducing operating costs.
- **Compact & Enclosed Design:** Small footprint and sealed body minimize odor and splashing, ensuring clean, space-efficient installation.
- **Intelligent Automation:** PLC-based control with variable-speed adjustment automatically optimizes operation based on sludge conditions, reducing manual oversight.
- **Environmentally Friendly:** Reduced power and water consumption make it a cost-effective, sustainable solution for modern wastewater treatment.



Working Principle

Conditioned sludge from the flocc tank enters the pre-thickening zone, then the screw conveys and compresses flocculated solids through alternating moving/fixed rings. Filtrate passes to the collection tray while the cake is progressively thickened and discharged at the outlet. Timed sprays keep the ring gaps open—no filter cloth to blind.



Features

Standard Features

- SS304 wet parts (SS316 optional)
- Pre-thickening spiral + screw press with moving/fixed rings
- Auto spray cleaning (PLC timed)
- Local control with VFD screw-speed control

Options & Accessories

- Floc tank with agitator and polymer make-up connections
- Level/flow interlocks; wash-water skid
- Covers, access platforms, cake bagging chute
- SS316 construction; IP upgrades

Specifications and Parameters


Type	Discharge Height (mm)	L (mm)	W (mm)	H (mm)	N.W (kg)	Operating Weight (kg)	Power (kW)	Water Consumption (L/H)
AQT131	250	1860	700	915	205	300	0.2	24
AQT132	250	1905	830	915	275	425	0.3	48
AQT201	350	2555	920	1465	320	470	0.74	32
AQT202	350	2615	960	1465	470	730	1.11	64
AQT301	495	3325	870	1760	910	1320	1.5	40
AQT302	495	3455	1135	1760	1350	2130	2.25	80
AQT303	495	3670	1560	1760	1820	2880	3.0	120
AQT351	585	3475	905	1820	1610	2210	1.1	72
AQT352	585	3570	1285	1820	2300	3400	2.75	144
AQT353	585	3645	1725	1820	3350	4850	3.85	216
AQT354	585	4130	2180	1820	4500	6100	4.95	288
AQT401	759	3905	1070	2210	2500	3400	1.85	80
AQT402	759	4240	1570	2210	3480	5200	2.95	160
AQT403	759	4465	2060	2210	4550	7050	4.05	240
AQT404	759	4670	2630	2210	6550	9660	5.15	320

Processing Capacity

Model	Raw Wastewater / Waste Activated Sludge / Chemical Precipitated Sludae		Dissolved-air Flotation Sludge		Mixed Raw Sludge / Aerobic Digestion Sludge / Sewage Sludge
	0.2%	1.0%	2.0%	5.0%	3.0%
AQT131	~4 kg-DS/h (~2.0 m ² /h)	~6 kg-DS/h (~0.6 m ² /h)	~10 kg-DS/h (~0.5 m ² /h)	~20 kg-DS/h (~0.4 m ² /h)	~60 kg-DS/h (~0.87 m ² /h)
AQT132	~8 kg-DS/h (~4.0 m ² /h)	~12 kg-DS/h (~1.2 m ² /h)	~20 kg-DS/h (~1.0 m ² /h)	~40 kg-DS/h (~0.8 m ² /h)	~52 kg-DS/h (~1.73 m ² /h)
AQT201	~8 kg-DS/h (~4.0 m ² /h)	~12 kg-DS/h (~1.2 m ² /h)	~20 kg-DS/h (~1.0 m ² /h)	~40 kg-DS/h (~0.8 m ² /h)	~52 kg-DS/h (~1.73 m ² /h)
AQT202	~16 kg-DS/h (~8.0 m ² /h)	~24 kg-DS/h (~2.4 m ² /h)	~40 kg-DS/h (~2.0 m ² /h)	~80 kg-DS/h (~1.6 m ² /h)	~104 kg-DS/h (~3.47 m ² /h)
AQT301	~20 kg-DS/h (~10 m ² /h)	~30 kg-DS/h (~3.0 m ² /h)	~50 kg-DS/h (~2.5 m ² /h)	~100 kg-DS/h (~2.0 m ² /h)	~130 kg-DS/h (~4.33 m ² /h)
AQT302	~40 kg-DS/h (~20 m ² /h)	~60 kg-DS/h (~6.0 m ² /h)	~100 kg-DS/h (~5.0 m ² /h)	~200 kg-DS/h (~4.0 m ² /h)	~260 kg-DS/h (~8.67 m ² /h)
AQT303	~60 kg-DS/h (~30 m ² /h)	~90 kg-DS/h (~9.0 m ² /h)	~150 kg-DS/h (~7.5 m ² /h)	~300 kg-DS/h (~6.0 m ² /h)	~390 kg-DS/h (~13 m ² /h)
AQT351	~40 kg-DS/h (~20 m ² /h)	~60 kg-DS/h (~6.0 m ² /h)	~100 kg-DS/h (~5.0 m ² /h)	~200 kg-DS/h (~4.0 m ² /h)	~260 kg-DS/h (~8.67 m ² /h)
AQT352	~80 kg-DS/h (~40 m ² /h)	~120 kg-DS/h (~12 m ² /h)	~200 kg-DS/h (~10 m ² /h)	~400 kg-DS/h (~8.0 m ² /h)	~520 kg-DS/h (~17.3 m ² /h)
AQT353	~120 kg-DS/h (~60 m ² /h)	~180 kg-DS/h (~18 m ² /h)	~300 kg-DS/h (~15 m ² /h)	~600 kg-DS/h (~12 m ² /h)	~780 kg-DS/h (~26 m ² /h)
AQT354	~160 kg-DS/h (~80 m ² /h)	~240 kg-DS/h (~24 m ² /h)	~400 kg-DS/h (~20 m ² /h)	~800 kg-DS/h (~16 m ² /h)	~1040 kg-DS/h (~34.68 m ² /h)
AQT401	~70 kg-DS/h (~35 m ² /h)	~100 kg-DS/h (~10 m ² /h)	~170 kg-DS/h (~8.5 m ² /h)	~340 kg-DS/h (~6.5 m ² /h)	~442 kg-DS/h (~16 m ² /h)
AQT402	~135 kg-DS/h (~67.5 m ² /h)	~200 kg-DS/h (~20 m ² /h)	~340 kg-DS/h (~17 m ² /h)	~680 kg-DS/h (~13.6 m ² /h)	~884 kg-DS/h (~29.5 m ² /h)
AQT403	~200 kg-DS/h (~100 m ² /h)	~300 kg-DS/h (~30 m ² /h)	~510 kg-DS/h (~25.5 m ² /h)	~1020 kg-DS/h (~20.4 m ² /h)	~1326 kg-DS/h (~44.2 m ² /h)
AQT404	~266 kg-DS/h (~133 m ² /h)	~400 kg-DS/h (~40 m ² /h)	~680 kg-DS/h (~34 m ² /h)	~1360 kg-DS/h (~27.2 m ² /h)	~1768 kg-DS/h (~58.9 m ² /h)

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