



EVOQUA ROTARY PRESS

A SIMPLE DESIGN THAT CONTINUOUSLY DELIVERS SOLID RESULTS

Technology

The Evoqua Rotary Press simply employs pressure and friction for cost-effective dewatering. The system operates continuously at a speed of < 1rpm to develop a pressure differential and frictional resistance to effectively dewater various types of sludges. Design simplicity coupled with a low operational speed results in a prolonged service life, minimal maintenance and energy consumption. This low speed also results in low energy use while producing high cake solids and quality filtrate. This Evoqua technology can be efficiently integrated into new or existing wastewater plants to consistently deliver high cake solids and quality filtrate. System includes a PLC control package, polymer feed and mixing system, rotary lobe pump, feed and discharge valves and piping. Evoqua Water Technologies also offers platform systems and sludge management, including conveyors and dumpsters.

Operation Requirements

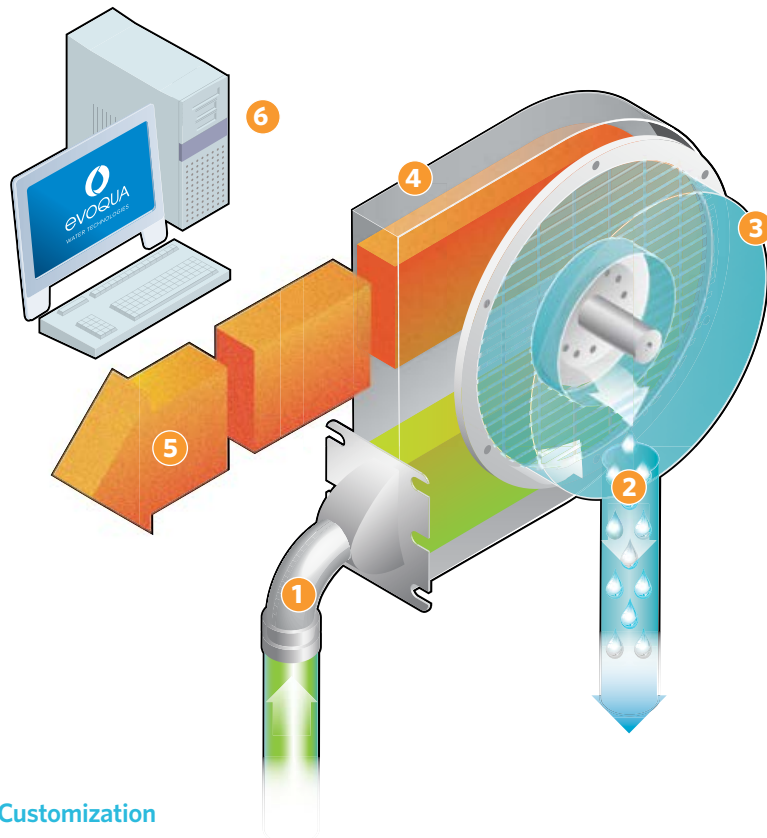
After start up, the rotary press can run continuously, 24/7 with little to no supervision required. If a fault is detected, a notification can be sent remotely to the operator and the machine will automatically shut down and clean in place. Automatic shut down and wash cycles can be scheduled as desired or to meet facility throughput requirements.

Applications:

- Municipalities
- Industrial
- Agriculture
- Petrochemical
- Food and Beverage
- Pulp and Paper

System Benefits:

- Space saving, small footprint
- Low maintenance requirements
- Minimal part replacements necessary
- Low operational cost, energy and water usage
- Little manpower required
- Simple operation
- Continuous process
- High cake solids capture
- Low odor, completely enclosed
- Plug and play/easy integration



System Process

- 1 Conditioned sludge is continuously fed into the space between the two filter screens
- 2 Pressure differential increases within the press and the liquid takes the path of least resistance through the filter screens, where the filtrate is expelled
- 3 The solids are held by the filter screens while additional moisture is continuously pressed out as the friction and pressure build
- 4 The solids advance to the discharge end of the press where a restrictor gate arm slows the solids, allowing a "cake" plug to form
- 5 The slow rotation of the press continues to form this cake plug until enough cake has built up to push past the restrictor gate where it is discharged from the press
- 6 Automated shutdown and wash cycles can be scheduled when needed

Customization

Multiple sizes available with expandability of up to four dewatering channels per press.

This allows for the ability to treat a range of flow rates and easily adapt to future changes in throughput.

Channel Number	Combined HP	Hydraulic Flow (gpm)	Maximum Solids (lbs./hr)	Length (ft)	Width (ft)	Height (ft)	Weight (lbs)
1	5.5	5 - 15	225	10.5	5	7	3,400
2	5.5	10 - 30	450	10.5	5	7	4,000
1	9	20 - 35	525	10.5	5.5	7	5,600
2	9	40 - 70	1,050	10.5	6	7	6,800
2	13.5	40 - 70	1,050	13	9	8.5	8,800
3	13.5	60 - 105	1,575	13	9.5	8.5	10,400
4	13.5	80 - 140	2,100	13	10	8.5	12,300
1	13.5	35 - 65	975	13	6	9	8,500
2	13.5	70 - 130	1,950	13	6.5	9	10,400
2	18.5	70 - 130	1,950	14	10	9	12,300
3	18.5	105 - 195	2,925	14	10	9	14,500
4	18.5	140 - 260	3,900	14	10	9	17,000