



Prime Solution Rotary Fan Press® and Rotary Fan Press 2.0®

Prime Solution is known in the wastewater treatment market as one of the most reliable manufacturers that delivers superior performance and customer service. With a humble start in a barn in the Midwest, Prime has evolved over the past 20 years into a global leader in superior dewatering solutions. Our mission is to design and manufacture operator friendly and simple, yet effective dewatering solutions that meet or exceed the needs and wants of our customers.

Build America, Buy America Act

In compliance with the requirements of The "Build America, Buy America Act," treatment plants seek straightforward mechanical dewatering solutions that deliver optimal performance, without the need for waiver applications or additional expenses. Prime Solution's Rotary Fan Press has consistently met these standards, even predating the Act. Our equipment effectively addresses space limitations by providing twice the throughput within a smaller footprint. Userfriendly features, such as easy start-up and scheduled automatic shut-down, based on volume or time, frees up plant personnel to focus on other key responsibilities. Additionally, minimal maintenance requirements and durable wear parts, coupled with energy and water efficiency, make it the logical choice for plants of all sizes.

PRIME ROTARY FAN PRESS® patented

- Lowest maintenance and cost
- Expandable throughput
- High cake solids and capture rates
- Proven technology
- Easily automated
- Easy start up and shut down
- Retro-fit without expansion
- Low speed



PRIME ROTARY FAN PRESS® 2.0 patented

Revolutionary. All the benefits of the original **Rotary Fan Press, plus:**

- Designed for sludge that releases moisture at a slower rate.
- Ultra-advanced, simplified low-shear dewatering device with a patented internal mixing element.
- Drier cake solids with higher throughputs at a lower cost.

APPLICATIONS

- Municipalities
- Food and Beverage
- Industrial
- Agricultural

SPECS

- 24, 36, and 48 inch diameter
- Sludge Cake Conveyors
- One to Six Dewatering Channels
- Emulsion Polymer Systems
- Free Standing/Skid Mounted/Mobile

Sizes and Capabilities

Model	Channels	Screen Dia. (in)	Filtration Area (ft²)	Combined Power (hp)	Feed Inlet (in)	Filtrate Outlet (in)	Water Inlet (in)	Hydraulic Flow (gpm)	Max. Solids Loading (d.s. lbs/hr)	Approx. Dims. LxWxH(ft)	Approx. Weight (lbs)
RFP2.0-24S	1	24	4.50	1.75	2	3	1.5	5 - 15	225	5.5 x 4.5 x 5	900
RFP2.0-24D	2	24	9.00	2.00	2	3	1.5	10 - 30	450	5.5 x 4.5 x 5	1,400
RFP2.0-36S	1	36	11.00	3.25	3	4	1.5	12 - 36	550	7.5 x 5 x 7	3,000
RFP2.0-36D	2	36	22.00	3.50	3	4	1.5	24 - 72	1,100	7.5 x 5 x 7	4,000
RFP2.0-36DE	2	36	22.00	5.50	3	4	1.5	24 - 72	1,100	8 x 6 x 8	5,000
RFP2.0-36T	3	36	33.00	5.75	3	4	1.5	36 - 108	1,650	8 x 7 x 8	5,500
RFP2.0-36Q	4	36	44.00	6.00	3	4	1.5	48 - 144	2,200	8 x 9 x 8	6,300
RFP2.0-48S	1	48	20.00	5.25	3	4	1.5	22 - 65	1,000	9 x 5.5 x 8	4,400
RFP2.0-48D	2	48	40.00	5.50	3	4	1.5	44 - 130	2,000	9 x 6 x 8	6,300
RFP2.0-48DE	2	48	40.00	8.00	4	4	1.5	44 - 130	2,000	10 x 6 x 8.5	7,800
RFP2.0-48T	3	48	60.00	8.25	4	4	1.5	66 - 195	3,000	10 x 6 x 8.5	9,200
RFP2.0-48Q	4	48	80.00	8.50	4	4	1.5	88 - 260	4,000	10 x 9 x 8.5	10,950
RFP2.0-48P	5	48	100.00	16.25	6	4	1.5	110 - 325	5,000	10 x 10 x 8.5	13,200
RFP2.0-48HX	6	48	120.00	16.50	6	4	1.5	132 - 390	6,000	10 x 11.5 x 8.5	14,700





Typical Results

Typical Application	Avg. Feed (% TS)	Avg. Polymer (lbs/d.t.)	Avg. Capture (% TSS)	Avg. Cake (% TS)	
Primary 100%	2 - 6	4-8	95 - 98	28 - 38	
Anaerobic	1 - 4	8-12	95 - 98	18 - 26	
Aerobic	1 - 3	10-14	95 - 98	15 - 22	
Primary/Sec. Mix	1 - 4	8-10	95 - 98	20 - 32	
WAS	1 - 3	9-15	92 - 98	15 - 22	
SBR	0.75 - 2	9-15	92 - 98	15 - 20	
Alum Treated WAS	1 - 3	8-14	92 - 96	12 - 16	
PAC Treated WAS	1 - 3	8-14	92 - 96	12 - 16	
Lime Sludge	5 - 9	8-14	95 - 98	28 - 45	
Septage	3 - 7	7-10	95 - 98	28 - 38	
Grease Trap (lime treated)	1 - 5	9-15	92 - 96	28 - 40	
DAF	3 - 6	8-14	92 - 96	20 - 28	
Coal Refuse	3 - 5	4-8	95 - 98	28 - 45	
Concrete Reclaim	5 - 15	7-10	95 - 98	28 - 45	
Swine	1 - 4	7-10	94 - 97	18 - 24	

Rotary Fan Press assembly, Otsego, Michigan