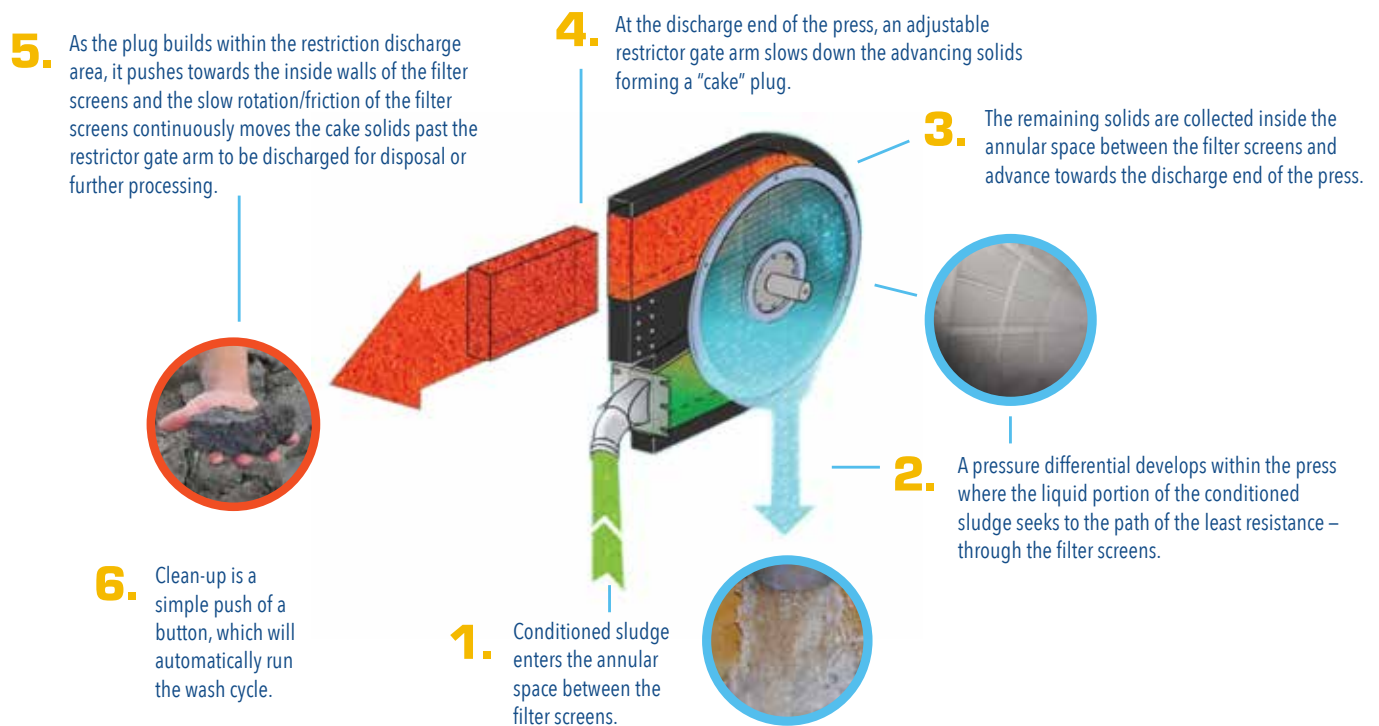


Dewatering Performance **SIMPLIFIED**

High-Performance, Cost-Effective Rotary Fan Presses[®]

Prime Solution designs, manufactures and services dewatering equipment. Our technology is designed and built in Michigan, in the heart of the USA, and we serve industries worldwide.

So Simple, It's Genius.



The totally enclosed, slow moving (<2 rpm), small footprint design with the lowest maintenance of any mechanical dewatering technology provides for long sustainable dewatering. The unit is controlled by a PLC and touch screen which provides fine adjustments, allowing infinite control of the unit and accurate detailed refinement of the operating parameters. The operator has the option to control the dewatering process from the sludge feed all the way through to the sludge cake transfer, thus interlocking the entire system for semi-automatic operation.

Not all sludge is created equal.

The Prime Rotary Fan Press® was designed to handle most common sludges, producing high cake solids and capture rates, while requiring less space, power and maintenance. Its strength is in its simple design.

The Prime Rotary Fan Press® 2.0 was designed for sludge that releases moisture at a slower rate. This ultra-advanced, simplified low-shear dewatering device with a patented internal mixing element will give you drier cake solids with higher throughputs at a lower cost.

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. User-friendly 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.



Family Farm to Global Leader

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 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.

- Headquartered in Otsego, MI
- Manufactured in the USA
- 30+ years of reliability and innovation
- Skid, trailer, and free-standing systems
- Dedicated customer service department
- Feasibility testing
- On-site pilots
- 100% Made in USA

30+ years of experience and over 200 installations worldwide. More up time and lowest cost of ownership.

We engineer from an operator's perspective – simple is better. Over the years, sludge dewatering requirements have changed along with sludge processes. Our family of Rotary Fan Presses has expanded to exceed these requirements while maintaining proven operational advantages, higher cake solids and capture rates along with capital saving of the lowest footprint per lbs of solids dewatered.

All of our rotary fan presses use a patented screen technology that uses simple pressure differential and friction resistance to provide superior dewatering performance at a lower cost and prolonged service life. The totally enclosed dewatering process has slow **operation speeds of <2 rpm**, minimal wear parts, produces high cakes solids and excellent filtrate. Low operational costs, minimal or no manpower required, and low energy and water use provide savings year over year. Models are available in several sizes ranging up to 390 gpm hydraulically, in a small footprint, and most models have the ability to accommodate additional channels for future increased throughput requirements.



The Prime Rotary Fan Press® Family

PRIME ROTARY FAN PRESS® *patented*

- Lowest maintenance and cost
- Twice the throughput of competing technology
- 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.



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

Sizes and Capabilities

Free Standing Unit – Rotary Fan Press and Rotary Fan Press 2.0

Model	Channels	Screen Dia. (in)	Filtration Area (ft ²)	Combined Power (hp)	Feed Inlet (in)	Filtrate Outlet (in)	Water Inlet (in)	Hydraulic Flow (gpm)	Max. Solids Loading (d.s. lbs/hr)	Approx. Dims. L x W x H (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

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

SPECS

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

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.
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APPLICATIONS

- Municipalities
- Food and Beverage
- Industrial
- Agricultural



Services & Ancillary Equipment



Prime Labs

Do you want to make sure the Prime Rotary Fan Press® will meet your dewatering requirements before you make a capital investment? Our no-cost wet lab can help you determine the effectiveness of the Prime Rotary Fan Press® on different applications. We'll provide sample containers and generate a feasibility report for you.



Pilot Testing

After we've determined the effectiveness of the Prime Rotary Fan Press® on your particular application, the next step is to see it in operation at your facility. Prime Solution will bring our mobile trailer to you for a demonstration of its functionality. We'll perform analysis of your cake solids and filtrate in our lab, allowing you to select the right chemistry and the right equipment to achieve the highest cake solids possible. At the end of the on-site demonstration, Prime Solution will provide a comprehensive report of the results.



Prime Services

At Prime Solution we pride ourselves on exceeding excellence, striving to always provide our customers with superior service. We offer Customized Service Maintenance Programs, New Employee & Refresher Training, Equipment Upgrades, and On-Site Support to maximize and enhance the operating and efficiency of our Prime Solution dewatering products.



Prime Conveyors

Not only can Prime Solution customize your dewatering needs, but we can also customize the way that you handle cake solids transference, offering multiple sizes and styles of conveyors to fit your application. With our rugged stainless steel construction and simple maintenance, you can be assured of many years of reliable and uninterrupted service.

Please contact us if you would like to learn more about Prime or speak to a salesperson.

