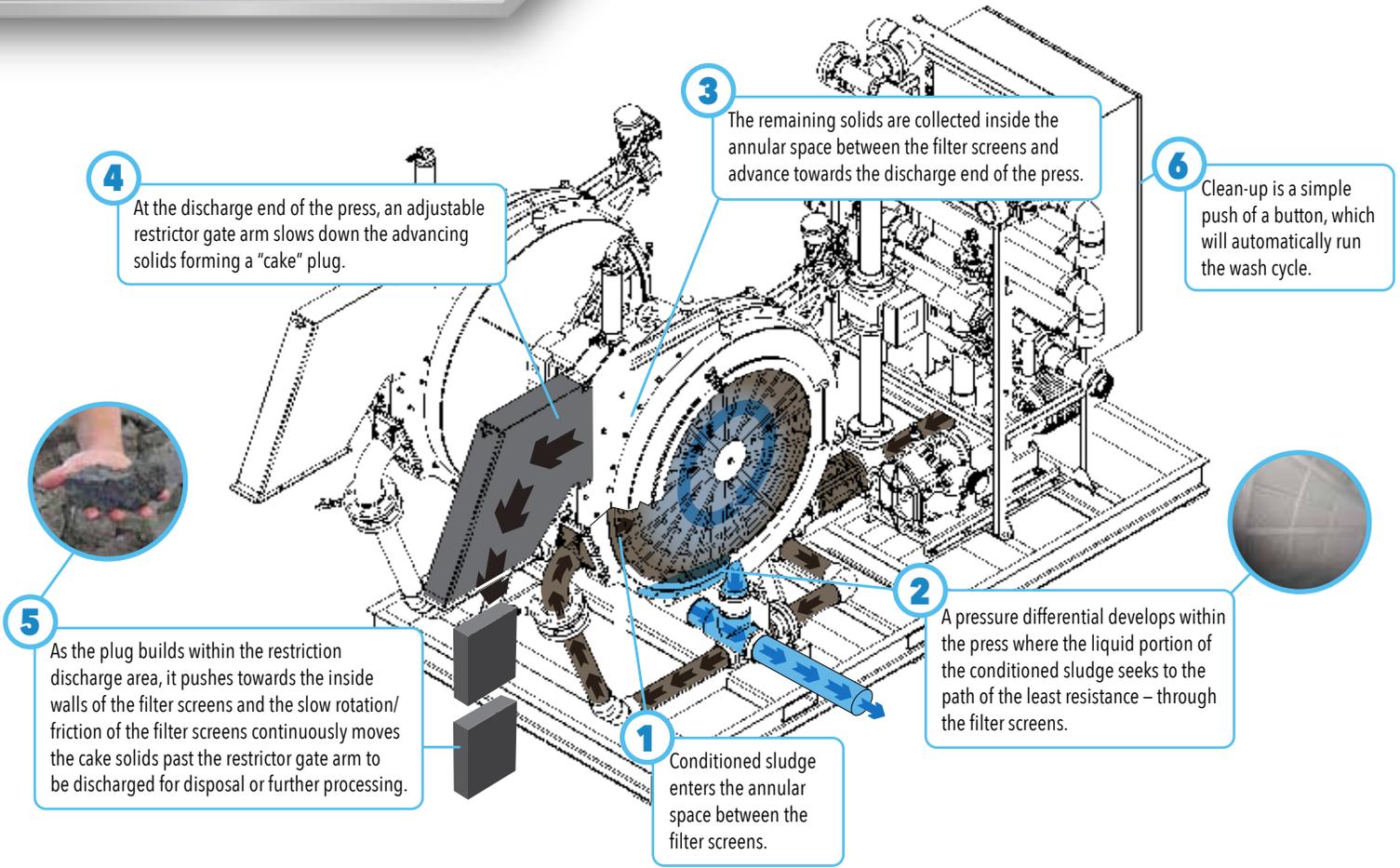


DEWATERING PERFORMANCE SIMPLIFIED



High-Performance, Cost-Effective Rotary Fan Presses®

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



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 dewatering equipment is created equal.

The Prime Rotary Fan Press® is an advanced, simplified low-shear dewatering system featuring a patented internal mixing element, which provides drier cake solids and cleaner filtrate. Our proprietary screens enable higher throughputs, resulting in space savings per square foot at a lower cost. Reduced power and water consumption provide cost savings and a sustainable solution. Because there are fewer wear parts, aftermarket costs are reduced, and maintenance time is lowered. Operators love the machine for its ability to process unattended, allowing them to work on other plant needs. The press can also shut itself down at the end of the day, undergo a thorough cleanout, and be prepared for the next day of processing.



Build America, Buy America Act - Made in the USA

On May 14, 2022, the requirements for The Build America, Buy America (BABA) officially took effect. Prime Solution's equipment has always been designed, sourced, and manufactured in the US. We believe in supporting our fellow Americans through strengthening the economy and providing jobs that allow people to earn a living wage and balance their work/family responsibilities.

Prime Solution's products have consistently met BABA standards without requiring waiver applications or additional expenses.

FAMILY FARM TO TRUSTED NAME



Rotary Fan Press assembly, Otsego, MI

With over 40 years of experience and more than 250 installations worldwide.

Prime Solution is recognized in the wastewater treatment market as one of the most reliable manufacturers, delivering superior performance and customer service. With a humble start in a barn in the Midwest, Prime has evolved into a trusted name with a proven track record of industry excellence, offering superior dewatering solutions. Our mission is to design and manufacture simple, operator-friendly dewatering solutions that meet or exceed the needs and wants of our customers.

- Headquartered in Otsego, MI
- Sourced and manufactured 100% in the USA
- 40+ years of experience in the industry
- Skid, press only, trailer and container systems available
- Feasibility testing
- On-site pilots
- Dedicated customer service centers



More time running, less money spent.

We engineer from an operator's perspective – simple is better.

We design for maximum performance. Over the years, sludge processes and sludge dewatering methods have evolved. The Rotary Fan Press has adapted and expanded to meet these requirements. With over 40 patents worldwide, our engineers and continuous improvement teams consistently listen to customers and the industry for feedback on improvements. And then design solutions to maximize results.

The Rotary Fan Press utilizes patented screen technology, which employs a simple pressure differential and friction resistance to provide superior dewatering performance at a lower cost and with a prolonged service life. The enclosed dewatering system operates at a speed of ≤ 2 RPM. This results in less wear and tear of bearings, gears, seals, and motors. Higher RPM equipment causes vibration, which leads to fatigue, misalignment, and noise pollution.

Testimonial

"I am very satisfied with the RFP. It has proven to be one of the best decisions I have made while here. It has saved countless hours and dollars, and has proven itself to be an integral part of the system. We are shorthanded and this has freed up time for us to pursue other issues. When it is running it is quiet. It does not use a lot of water or power."

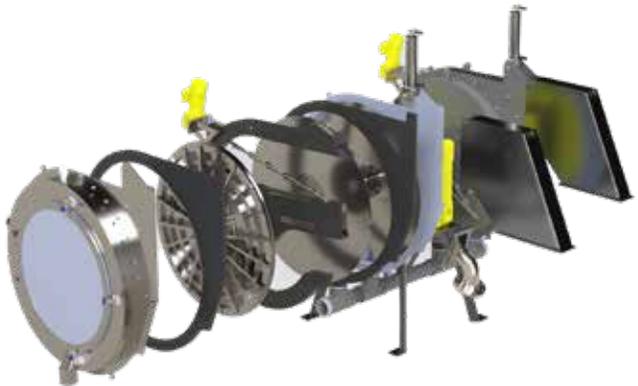
– Dale Vanderhoof, Superintendent, Larned Water Recycling Center,
Larned, KS



Larned Water Recycling Center, Larned, KS

Distinctive Benefits

- 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
- 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.



Testimonials

"After running dewatering equipment for the past 14 years (belt press, gravity belt, screw press, centrifuge, etc.), I recognized Prime Solution's RFP is a unique piece of process control equipment for solids dewatering. I have recommended the equipment to other plant managers because of the quality of solids it creates, the compact clean footprint and the easy operations. It's like nothing else in the dewatering industry"

– **Jacob Hansen**, Plant Superintendent, Eagle Mountain, UT

"It's pretty much paid for itself, in a short amount of time."

– **Chris Jamiel**, Superintendent, Water Pollution Control Center, Cambridge, OH

"Once you get it set, it's as easy as coming in and pressing the start button. No babysitting at all. Once you get it started and going, it runs itself."

– **Doug Frye**, Waste Water Superintendent, Barneville, OH

"Every time I see it running, I think to myself: how can such a small machine do such a big job; and do it so well? I am amazed!"

– **Dale Vanderhoof**, Superintendent, Larned Water Recycling Center, Larned, KS

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 & CAPABILITIES

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
RFP2.0-48S	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

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
- Change to Skid Mounted, Press Only, Mobile and Container Systems.

Max solids loading listed above is based on primary sludge at 3% feed solids. Type and variation of sludge/process, feed and volatile solids concentration, and polymer selection will impact capacity and results.

Testimonials

"We have had our Rotary Fan Press since February 2018 and are very happy with the performance. We haven't had any issues, and it is performing as designed. It is a solid, heavy-duty piece of equipment. It is a very valuable tool that allows us to meet our dewatering capability with low maintenance. We have had to do very little with it. It does its job. It just works. It's a great unit."

– Michael May, Facilities Manager, Russian River Brewery, Windsor, CA

"Adding a second press not only cut down time on dewatering, but allowed the city to save money. We went from running 10-12 hours per day, 7 days a week to 8 hours a day five days a week. Also, the ease of use and low maintenance allow us to easily train operators and meet plant requirements with fewer hours required."

– Shari Haynes, Plant Superintendent, Tybess Island, GA

"I have nothing but respect for Prime Solution's service technicians. They have answered every question I have ever had. They respond immediately unless they are on an airplane. There is not any problem we have had that we were not able to work out over the phone."

– Tony Scarborough, Senior Wastewater Operator for MUD District 165 and H2O Consulting, Harris Co., TX



WWT Plant, MUD District 165, Harris Co., TX



WWT Plant, Tybee Island, GA



Prime Labs

Do you want to ensure the Prime Rotary Fan Press meets your dewatering requirements before making a capital investment? Our no-cost wet lab can help you determine if the Rotary Fan Press is a good fit for your sludge. We provide sample containers at no cost.



Pilot Testing

After determining the feasibility of the Prime Rotary Fan Press as a solution for your specific application, we can offer a pilot demonstration to observe the press in operation at your facility. Prime Solution will bring our mobile trailer for you for a demonstration of the press's functionality on your sludge. We will then perform an analysis of your cake solids and filtrate results in our laboratory, allowing you to select the right chemistry and equipment to achieve the highest possible cake solids. A comprehensive report of results will be provided at no cost.



Prime Customer Services

At Prime Solution, exceptional customer service is at the core of everything we do. We pride ourselves on being responsive, knowledgeable, and proactive - offering hands-on support from the first inquiry through ongoing operations. We also provide customized service maintenance (PM) programs, new employee & refresher training, equipment upgrades, and on-site support to maximize and enhance the operating and efficiency of our products. This includes **Channel Adders** to increase the capacity of previously purchased equipment.



Prime Conveyors

Prime can customize the way you handle your cake solids transference, offering multiple sizes and styles of conveyors to fit your application. When durability meets precision, you get more than a conveyor - you get a competitive advantage. Our steel conveyor systems are specifically designed for your operation, offering reliability and long-term performance. Our conveyors deliver the performance you can count on.



PRIMEBLEND™ Polymer Preparation System

The PrimeBlend emulsion poly system is a compact, self-contained solution designed to optimize polymer preparation while minimizing polymer usage and maximizing efficiency.

Our BABA-compliant system delivers proven performance and reliability, backed by a quality design that offers considerable cost savings.

Originally developed as a key component of Prime's Rotary Fan Press® package, the PrimeBlend offers a simple, cost-effective polymer solution that meets a wide range of mechanical dewatering needs.

To begin the ordering process for a PRIMEBLEND™ system call (269) 694-6666



Please contact us if you would like to learn more about Prime Solution and the revolutionary Rotary Fan Press®.

610 S. Platt St. | Otsego, MI 49078 | (269) 694-6666 | psirotary.com