



PRIME
Dewatering Performance - Simplified

ROTARY FAN PRESS[®]

***Continuous Low Speed • Pressure Differential
• Long Life • Liquid/Solid Separation***

Revolutionary Dewatering Technology for:

- Municipalities
- Industrial
- Agricultural
- Petrochemical
- Food
- Gas, Oil, and Mining

Prime Solution, Inc.
(269) 694-6666
www.psirotary.com

Dewatering Performance - Simplified



"In 45 minutes, anyone can figure out the touch screen. It's easy to operate. We dreaded shutting down the old belt press because it took an hour to restart. This Rotary Fan Press® is like a light switch. Once I dial it in and set it up, nothing changes no matter how often I turn it off and on. The numbers on the solids are phenomenal for aerobically digested sludge."

*Tim Fristoe – Plant Operator
Front Royal, Virginia
Waste Water Treatment Plant*

Size Matters

The compact design of the Prime Rotary Fan Press® (RFP) integrates easily into any facility because it does not require structural building modifications. Its small footprint ranges from 40-80 square feet, making Prime the dewatering system with the highest throughput per area of floor space.

System Integration

Thanks to its compact and self-contained systems, installation is streamlined, saving time and space. Each RFP Skid System is pre-wired and preplumbed, ensuring a simple and successful installation.

Fully Enclosed

Protect operators from odor, noise and exposure to harmful pathogens and aerosols, as well as protect the surrounding environment from spills that can lead to corrosion.

Safe and Easy

The simple, robust design of the RFP makes it user friendly, requiring minimal supervision. A simple push of a button will quickly startup or shutdown the system. Few mechanical parts combined with the slow revolution of the RFP reduces noise, shear, and vibration, to increase functionality, minimize maintenance and improve life cycle costs.

Expandability

The design of the 36" and 48" RFP allows for future growth at your facility: You can double your current throughput while still maintaining a small footprint.

24/7 Automated Ops, Self-Cleaning and Simple Maintenance

Use the automated self-cleaning feature daily while the RFP is running to reduce system maintenance and wash water consumption, improve dewatering efficiency, and extend machine life. Unlike other dewatering alternatives, the RFP does not require specialized maintenance. Many RFP replacement parts are available through local vendors. Better yet, facility personnel can perform system maintenance tasks, minimizing downtime and repair costs.



Small Footprint - Big Impact



Free Standing Systems

The Prime Free Standing System adapts easily into existing or new applications for dewatering. With several sizes available and model expandability, the space saving, totally enclosed, low speed operation allows for easy integration for almost any application.



Skid Mounted Systems

Prime Solution Skid Mounted Systems come factory-assembled, tested and ready for immediate operation. Each system is pre-engineered for easy integration into your facility's system. These enclosed units offer high throughputs within a compact space.



Mobile Trailer Systems

Our Mobile Trailer Systems give you the flexibility to move where you need dewatering. Whether you have more than one facility, service other facilities, or just need to save on the cost of building a new facility, we can provide a complete turnkey mobile system, with trailer sizes ranging from 14' to 53'.



Ancillary Equipment

Emulsion Polymer System

Using high mix energy with low shear to activate polymer, our Primeblend Polymer System's compact, low maintenance design minimizes polymer consumption.

Sludge Cake Conveyors

Custom designed to fit your application, in either belt or screw configurations.

High Performance - Low Cost

Comparative Data	Prime Rotary Fan Press	Belt Filter Press	Centrifuge	Screw Press	Plate & Frame
Low Purchase Price	X				
Minimal Space Requirements	X		X		
Continuous Operation	X	X	X	X	
Totally Enclosed	X		X	X	X
Low Power Consumption	X			X	
Minimal Parts Wear	X				
High Cake Solids	X		X		X
Minimal Wash Water Required	X		X	X	
Easily Automated	X		X		
No Special Building Design Needed	X				
Expandable	X				X
Easy, Fast Start-up & Shut-down	X				

Your Prime Solution for Municipal, Industrial, Agricultural, Petrochemical, Food, and Gas, Oil and Mining Applications

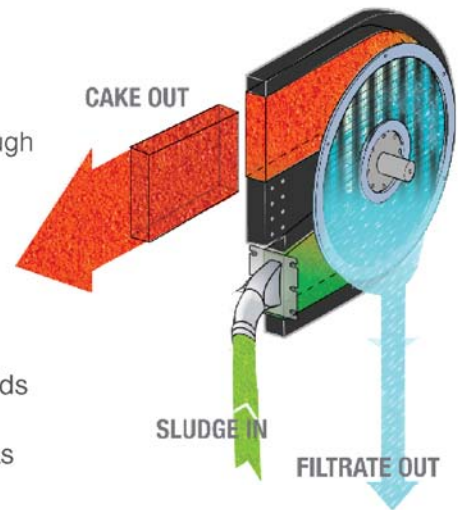
Prime Solution meets the biosolids dewatering needs of municipalities and industries that face the combined pressures of restricted budgets, government performance demands, limited footprint, and biosolids handling requirements.

- Primary 100%
- Anaerobic Digested
- Aerobic Digested
- Primary/Secondary
- WAS
- SBR
- Alum Sludge
- PAC 20
- Lime Sludge
- Septage
- Grease Trap (Lime Treated)
- DAF
- Coal Refuse
- Concrete Reclaim
- Dairy
- Swine
- Drilling Applications

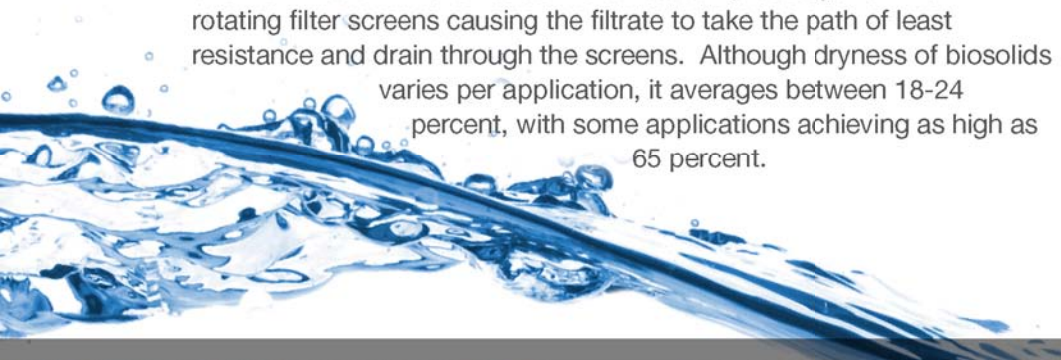
MODEL	LENGTH	WIDTH	HEIGHT	WEIGHT	PRESS SKID MIN SIZE	UTILITY SKID MIN SIZE	DEWATERING AREA
RFP18S	107"	42"	75"	2,300lbs	X	X	2.25
RFP24S	125"	60"	80"	3,400lbs	X	X	4.28
RFP24D	125"	61"	80"	4,000lbs	X	X	8.56
RFP36S	127"	64"	85"	5,600lbs	X	X	10.32
RFP36D	127"	68"	85"	6,800lbs	X	X	20.64
RFP36T	143"	108"	96"	8,400lbs	62"L X 108"W X 83"T	68"L X 77"W X 89"T	30.96
RFP36Q	143"	110"	96"	9,800lbs	62"L X 110"W X 83"T	68"L X 77"W X 89"T	41.28
RFP48S	156"	72"	105"	8,200lbs	X	X	18.82
RFP48D	156"	74"	105"	10,200lbs	X	X	37.64
RFP48T	164"	113"	105"	15,000lbs	76"L X 113"W X 88"T	72"L X 109"W X 87"T	56.46
RFP48Q	164"	118"	105"	17,100lbs	76"L X 118"W X 88"T	72"L X 109"W X 87"T	75.28

Revolutionary Technology for Municipalities, Industrial, Agricultural, Petrochemical, Food, and Gas, Oil and Mining

The Prime Rotary Fan Press® (RFP) uses patented screen technology and fundamental physics: Friction and pressure to force water out through the path of least resistance. The conditioned sludge is fed into the enclosed slow moving (<1 rpm) dewatering channel between two parallel stainless steel, filter screen plates. When biosolids enter the press, pressure increases as waste moves slowly through a tapered channel. Friction intensifies as the solids compress against two rotating filter screens causing the filtrate to take the path of least resistance and drain through the screens. Although dryness of biosolids varies per application, it averages between 18-24 percent, with some applications achieving as high as 65 percent.



Friction and Pressure Create High Percentage Cake Solids



Max Cake Solids



Excellent Filtrate

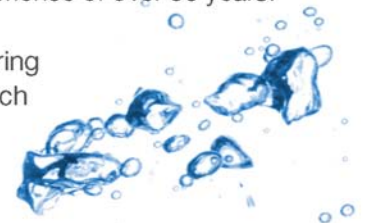


Low Cost Installation

Highest Standards - Lowest Life Cycle Costs

Many integral considerations go into choosing the right equipment for your dewatering application. The Prime RFP was designed, developed and patented to meet or exceed the following customer requirements: purchase value, minimum building requirements, high cake solids, solids capture rate, low polymer usage, low power requirement, continuous operation, semi-automatic operation, enclosed dewatering, slow moving, minimal wear parts, no bearings in contact with the sludge, minimum maintenance and superior customer service. Prime Solution, Inc. exceeds these goals with a combined dewatering experience of over 30 years.

An EPA approved dewatering technology, the RFP is considered a green dewatering alternative due to its minimal electrical energy and wash water requirements, which provide significant cost savings while reducing the facility's carbon footprint.



On-site Demonstration, Pilot Testing and Lab Screening

An on-site demonstration lets you see first-hand how the Prime dewatering system will work within your facility. Full scale unit pilot testing and free lab screening explores the most cost-effective treatment needed to achieve your goals and help determine how the Prime Rotary Fan Press® can be configured to your individual needs.



Customer Service, Warranty and Support

Customers rank Prime “number one” in customer service. We don’t leave you on your own after you’ve purchased our dewatering equipment. Each machine includes a standard one-year warranty and full commitment to our customer’s success.



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The Responsible Use of Land, Water and Energy Resources in the Dewatering of Sludges and Biosolids

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Patent List

Rotary Fan Press

Unites States 7 895 943, Australia 2005274026, China ZL200580030702.3, South Korea 10-0795159, Mexico 280424, New Zealand 552926, New Zealand 583419, Canada 2 575 308, Hong Kong HK1114044, Hong Kong HK1125592, European Community 2108427