

# PRIME SOLUTION ROTARY FAN SCREW PRESS (RFSP)

#### **TOP INDUSTRY PERFORMANCE**

Prime Solution introduces the Prime Rotary Fan Screw Press™ to our family of Rotary Fan Presses. It combines the simple construction and pressure differential dewatering of our Rotary Fan Press with the addition of our patent-pending compression screw with its fully adjustable pneumatic restrictor. The continuous, enclosed operation uses an energy-efficient, slow-speed main drive, operating between 0.2 – 1.5 rpm. Unlike other screw presses, the screens and screw do not make contact, so there is minimal wear and a longer service life.

The patented, slow-rotating screens form the unique dewatering channel, providing 60 times more (at 1 rpm) filtration area within the small footprint as compared to other dewatering technologies. Also, the Prime Rotary Fan Screw Press™ is expandable to meet the growing dewatering needs of your operation. No more worrying about being stuck with insufficient equipment.

The Prime Rotary Fan Screw Press<sup>TM</sup> uses a unique channel technology with the option to add more channels should additional capacity be required in the future. The controls are easily programmable to optimize the dewatering process to your particular sludge/slurry.

## INSTANT ADVANTAGES WITH A LIFETIME OF BENEFITS

The Prime Rotary Fan Screw Press™ combines the best of both worlds, boasting all the benefits of the original Prime Rotary Fan Press™ and the screw press. The same technology that has given you an unmatched, low life-cycle cost has gone a step further with an additional compression zone and screw press technology. The Prime Rotary Fan Screw Press™ can operate in a smaller space while producing a larger throughput.

- Dewatering without the need for prior thickening
- Volume reduction up to >97% in one operation
- Minimal operator attention required
- Adaptable to varying sludges/slurries
- Minimized operator attention
- Lower capital requirements
- Reliable operation with more up-time
- High filtration area within a small footprint
- Continuous enclosed dewatering
- Low-speed operation, vibration-free, almost noiseless
- Energy-efficient, gear-reduction technology
- Models available: Free-standing/Skid Mounted/ Mobile
- High solids capture rates
- Maximum cake solids
- Integrated process controls





### **MODEL REFERENCE**

#### PRIME ROTARY FAN SCREW PRESSTM (RFSP)

MODEL	CHANNELS	APPROX. WEIGHT (lbs)	PRESS DRIVE HP	STATIC (ft) FILTRATION AREA	AVG. THROUGHPUT LBS/HR
RFSP24S	1	2,400	2 1/4	4.28	30-150
RFSP24D	2	3,200	3	8.56	60-300
RFSP36S	1	2,800	4 ½	10.32	70-360
RFSP36D	2	4,400	6	20.64	140-720
RFSP36DE	2	7,400	8	20.64	140-720
RFSP36T	3	9,500	9 ½	30.96	210-1080
RFSP36Q	4	9,900	11	41.28	280-1440
RFSP48S	1	6,900	7	18.82	130-660
RFSP48D	2	8,900	9	37.64	260-1320
RFSP48DE	2	10,500	11 1/2	37.64	260-1320
RFSP48T	3	13,300	13 ½	56.46	390-1980
RFSP48Q	4	16,200	15 ½	75.28	520-2640

All specifications and information are subject to change without notice. All rated capacities are variable/sludge dependent. The Prime Rotary Fan Screw Press is Patent Pending. The Prime Rotary Fan Press is patented. The Prime Rotary Fan Screw Press is a pending registered trademark of Prime Solution Inc.

**FREE-STANDING SYSTEMS:** The Prime Free-Standing System easily adapts 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.

**SKID SYSTEMS:** Prime's Skid Systems come work-ready and fully integrated for turnkey operations. No need to deal with multiple vendors for the installation of ancillary equipment. It's all included. Connect the pre-plumbed and pre-wired system, and you're ready to go.

**MOBILE SYSTEMS:** Whether you have more than one facility, service several facilities, require backup portability, or just need to reduce the cost of putting up a new building, Prime can customize all of our equipment in a complete, turnkey, compact, mobile system.

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