



Orbital 3000 Drying Shaker

COMPANY GOALS

Since Vortex Fluid Systems founding, our goals have been simple. Serve our customers by creating the best performing and most durable shaker, with the best screen life of any shaker in the industry. With over 500 shakers in operation worldwide, and a loyal satisfied customer base, we have accomplished these goals, and are excited about what the future holds for ourselves and most importantly our customers.

PERFORMANCE

The Orbital 3000 Drying Shaker (3000DS) uses orbital motion for extended screen life and excellent conveyance. The large screen area of 30 ft² and high g forces of over 6 g's result in exceptional performance. Shaker performance can be characterized by the product of screening area and g's. This unit, run at 6.25 g's, provides 188 ft²-g's. This is *one of the largest perfor-*

SCREEN LIFE

Over the life of a shaker, the total cost of screens, will often amount to far more than the cost of a new shaker. In order to minimize user cost, VFSI has produced a shaker that has truly exceptional screen life. Our screens regularly last a month without needing to be replaced.



MADE IN USA

Vortex Fluid Systems manufactures all equipment in the United States of America. At Vortex Fluid Systems, we are relentless in our pursuit of quality. Our skilled craftsman and steelworkers give each shaker unbeatable durability.

DIMENSIONS

The Orbital 3000DS with 10 barrel sump is dimensions are 7' 7" wide and 9' 10" long.

Drying Shaker Ten Barrel Sump Base



Drying Shaker Open Frame Base with Walkways



Drying Shaker Open Frame Base



ORBITAL 3000 DRYING SHAKER WITH 10 BARREL SUMP

- 30 ft² of screening area
- high performance
- competitively priced
- walkway on both sides
- dependable and durable
- low maintenance
- minimal operational costs
- "V"-bottom sump
- simple screen adjustment
- vibration isolation
- minimal noise
- feed and discharge angle change

Serving Customers Worldwide: www.vortexfluidsystems.com
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Orbital 3000 Drying Shaker Ten Barrel Sump

DURABILITY

All baskets are fully seal welded and stress relieved. Seal welding reduces corrosion, adding years to machine life. The Orbital 3000 pretension screening machine requires minimal maintenance.

CORROSION PROTECTION

Two layers of powder coat. Baked on zinc-rich epoxy first coat provides corrosion resistance. Final coat provides abrasion resistance. Most fasteners are stainless steel, providing excellent corrosion resistance.

VIBRATION ISOLATION

The Orbital 3000 is exceptionally quiet, due to efficient isolation, orbital motion and a sturdy base. With the machine running, it is possible to stand a nickel on edge at each corner of the machine.

BENEFITS IN PROCESSING CUTTINGS

One of VFSI's Orbital 3000 Drying Shaker advantages is in processing cuttings. Competitor units have stationary sections which funnel cuttings to the shaker. These areas commonly plug up, must be cleared, and can cause a mess. The VFSI Orbital 3000 Drying Shaker features an extended section of the basket which vibrates with the basket. Cuttings fall into this extended section and are vibrated onto the screen eliminating cuttings holdup.

TEN BARREL SUMP

The ten barrel sump reduces reservoir pump cycles.

GRATED WALK WAYS

The grated walkways on each side of the unit keep the operator "out of the mud" and provide a convenient height to change screens and monitor performance.

SCREEN LIFE AND CONVEYANCE

Screen life on Orbital 3000 Drying shakers is excellent. Solid conveyance is excellent as well.

COST SAVINGS

The table below shows the cost savings using a Vortex Fluid Systems shaker versus other manufacturers shakers. Cost savings are based on a 4 screen shaker, with one set of screens used per month on a typical Vortex Fluid Systems Shaker. Because screen prices vary, price values of \$250, \$300 and \$350 per screen are given. Brand 1 requires two screen changes per month, and Brand 2 requires 4 screen changes per month, and Brand 3 requires a whopping 8 screen changes per month. Cost savings are shown in the right three columns. ***In the first 3 years it would be common to save from \$36,000 to \$300,000 in screens by using the Vortex Fluid Systems shaker versus other shaker brands.***

Shaker Type	Usage Rate (Screen Changes Per Month)	Cost Per Screen	Cost Savings for 1 year	Cost Savings for 3 year	Cost Savings for 6 year
Brand 1	2	\$250	\$12,000	\$36,000	\$72,000
Brand 1	2	\$300	\$14,400	\$43,200	\$86,400
Brand 1	2	\$350	\$16,800	\$50,400	\$100,800
Brand 2	4	\$250	\$36,000	\$108,000	\$216,000
Brand 2	4	\$300	\$43,200	\$129,600	\$259,200
Brand 2	4	\$350	\$50,400	\$151,200	\$302,400
Brand 3	8	\$250	\$84,000	\$252,000	\$504,000
Brand 3	8	\$300	\$100,800	\$302,400	\$604,800
Brand 3	8	\$350	\$117,600	\$352,800	\$705,600

*cost savings based on one screen change per month of a Vortex Fluid Systems shaker

Martin Vibrator

Martin 5900 vibrators are exceptionally durable. The Martin vibrators are capable of delivering 6 g's of vibration to the Orbital 3000 basket making the Orbital 3000 a "high g" machine.



Screen Adjustment



Jacks at the feed and discharge end of the shaker allow the operator to accommodate varying slide heights. The jack at the discharge end allow the operator to vary the screen angle to effect screen retention time.

Isolators

Stainless steel spring isolators provide excellent isolation efficiency while maintaining superior corrosion resistance.



Wedge Block

- Durable polyurethane wedge block holds screens securely in place.
- Manufactured with a steel insert for increased rigidity.



Wedge Block Installation Tool

Wedge block fastener produces easier and more secure tightening of wedge blocks against the screen.



Tool Kit

The Orbital 3000 is equipped with a tool kit containing tools for operation and basic maintenance of the Orbital 3000 shaker and Martin vibrators. The kit includes, wedge block tightener, grease, grease gun, allen wrenches, a wrench, and deep sockets



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