

Vortex Fluid Systems Inc.

Serving our Customers Worldwide...

Orbital 3000

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 a loyal satisfied customer base, we have accomplished these goals, and are excited about what the future holds for our customers.

The VFSI shaker product line is unique and not a copy of any other shaker in the industry. At VFSI we use only high quality components and welding practices when fabricating each shaker. In addition to quality materials and fabrication the VFSI line of shakers have outstanding performance. With over 6g's of vibration acceleration and 30ft2 of screening area.



- 30 ft2 of screening area
- · high performance
- · competitively priced
- · minimal operational costs
- · simple to adjust screen angle
- two layers powder coat, a first coat of zinc rich epoxy provides corrosion resistance, a final coat provides abrasion resistance
- g-force of over 6.9 g's
- · dependable and durable
- one of the lowest weir heights in the industry
- low noise produced by efficient isolation, orbital motion, and a sturdy base; it is possible to stand a nickel on each corner while the machine is running



SCREEN SEALS

Our newly designed, patent pending screen seals snap into place and can be replaced as easily as replacing a set of screens.



RECOMMENDATION

Justiss Oil Company has been using Vortex Fluid Systems, Inc. shale shakers for several years. We liked the performance so well we now run these shakers on all our rigs. We typically spud and complete wells with 210 mesh screens in all geographic areas where we work. The simple yet rugged design of this shaker is what the oilfield needs.

Product service from this privately owned company is excellent. The company owner is the designer of the shaker, and is available to discuss any aspect of the product, and has the authority to resolve any problem.

Sincerely, J.F. "Jim" Justiss III V.P. of Operations



Orbital 3000

Performance

The Orbital 3000 has 30 ft² of screening area and 6.9 g's making it one of the largest performance ratings in the industry.

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, even in oil based muds.

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.

Wedge Block

The Orbital 3000 Dual comes with a tool box containing equipment for operation and basic maintenance of the Orbital 3000 shakers and Martin

vibrators.

- wedge block installation tool
- ISOFLEX TOPAS NB 52 vibrator grease
- grease gun
- allen wrench set
- 1/4 in metric deep socket
- extra isolator



Isolators

Stainless steel spring isolators provide superior isolation and corrosion resistance. An Orbital 3000 resting on flat concrete will not "walk".



Screen Adjustment

The angle of the screen basket can be adjusted from 1 to 5 degrees from either side using a hand crank.



The explosion proof electrical box is powder coated, has an "O" ring seal on the door and rubber boots on the switches. Customer wiring consists of hooking power to the terminal strip.



Bypass Gate

By adjusting a short pipe within the flow distributor, flow is spread evenly across the basket.



Electrical Box



Wedge Block Installation Tool

The wedge block installation tool simplifies wedge block installation and removal. This tool reduces the chance of screen damage.



Martin/Italvebras Vibrator

The Martin/Italvebras 5900 vibrators are exceptionally durable. The Martin/Italvebras vibrators are capable of delivering 6 g's of vibration to the Orbital 3000.



Wedge Block

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



HIGH PERFORMANCE

The combination of screen surface area, high g's and screen motion makes the Orbital 3000 one of the best performing machines in the industry.

SCREEN SURFACE AREA

Screen Surface area to a great extent establishes the fluid throughput of the machine. The Orbital 3000 has 30 $\rm ft^2$ of screening area. This makes the Orbital 3000 among the largest in the drilling industry. At the same time, the footprint of the machine is approximately 10 ft by 5 ft so that the machine fits on 10 ft wide tanks.

G-FORCES

Increasing g's increases liquid throughput. Increasing g's also increases solids conveyance. By conveying solids out of the way, liquid throughput is increased. The Orbital 3000 is capable of over 6.9 g's (7.5 g's optional).

SCREEN MOTION

The Orbital 3000 uses a progressive eliptical motion. The machine produces narrow ellipses at the feed end with broader ellipses at the discharge. This eliptical motion produces a high rate of conveyance of solids from the feed to the discharge. The result is maximum throughput. Orbital motion also provides improved maximum screen life.

MINIMAL SCREEN COST

The Vortex Fluid Systems Orbital 3000 shale shaker has been proven to excel, not only performance, but screen life.





