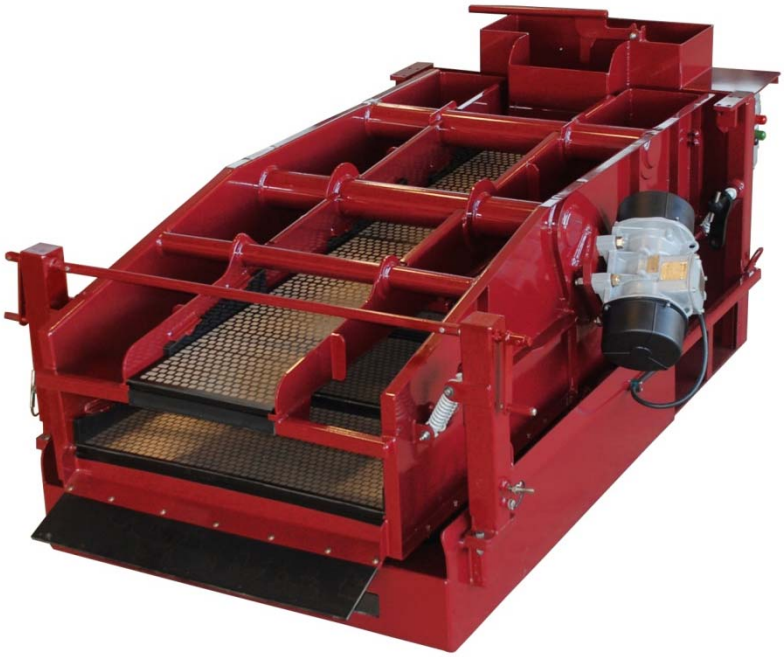
SCM-ELLIPSE 4PDD
CASCADING SHALE SHAKER



Midgard offers a comprehensive range of Solids control equipment for oilfield applications. Our line of high performance shakers are specifically designed and engineered to efficiently and reliably separate solids from drilling mud thus reducing waste volumes and associated costs.

The SCM-Ellipse 4PDD Cascading Shaker is a Balanced Elliptical Motion Shale Shaker which produces a range of 6.0 – 7.75 g's of vibrational force. The Ellipse 4PDD Cascading Shale Shaker has been designed with an impressive 48 ft^2 of screening area while maintaining a small equipment footprint. The larger screening area of 48 ft^2, 6.0 – 7.75 g's of force and linear motion results in excellent solids conveyance and outstanding performance.

PERFORMANCE

Shale shaker's performance can be characterized as a product of screening area multiplied by G force, the range of 246 – 374 ft^2-g's is one of the highest in the industry and this results in excellent separation and solids conveyance while extending screen life.

VIBRATOR

The SCM-Ellipse 4PDD Cascading Shaker uses MVSI Vibrators which are extremely durable with long life bearings producing less noise. The MVSI Vibrators deliver a range of 6.0 – 7.75 g's of vibrational force to the Ellipse 4PDD Cascading Shaker.

FEATURES & BENEFITS

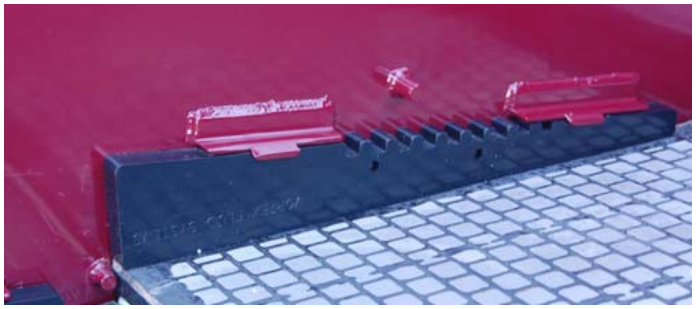
- Balanced Elliptical Motion Cascading Shaker with a range of 6.0 – 7.75 g's of vibrational force
- Large screening area of 30 ft^2 (2.79m^2) and additional upper screening area of 18 ft^2 (1.67 m^2)
- Full view of the lower deck while operating
- Small equipment footprint
- Durable polyurethane wedge blocks hold screens securely in place
- Baskets are fully seal welded and stress relieved
- Two (2) layers of powder coat. Baked-on primer for corrosion resistance and abrasion resistance final coat
- Cascading Shakers are engineered to minimize screen wear
- Easy screen inspection, removal, and installation
- Low weir height
- Efficient vibration isolation, hence a quiet machine during operation
- Seal welded baskets reduce corrosion and increase machine life
- Minimal maintenance with few spares parts required

VIBRATION ISOLATION

Stainless steel spring isolators provide superior vibration isolation and corrosion resistance. The Shaker basket is hung from the spring and the springs are constantly in tension which gives superior isolation while allowing for superior vibration transmission throughout the basket with no vibration dampening.

WEDGEBLOCK

Durable polyurethane wedge blocks hold screens securely in place. Wedgeblock fasteners produce easier and better tightening of wedge blocks against the screen hence ensuring screens remain tight independent of wear.



DURABILITY

All baskets are fully seal welded and stress relieved which not only improves vibration transmission to the screen but also reduces corrosion, adding years to the machine's life.

SPECIFICATIONS

General	
Model	SCM-Ellipse 4PDD
Speed	1800 RPM
Variable G Force Range	6.0 – 7.75 g's
Screens	
Upper Screens	
Number of Screens	2
Screen Area per Panel	6.51 ft^2 (0.605 m^2)
Screen Panel Area	9.03 ft^2 (0.838 m^2)
Non-Blanked Screen Area	13.02 ft^2 (1.02 m^2)
Screen Angle	-4 to +4 degree
Lower Screens	
Number of Screens	4
Screen Area per Panel	5.56 ft^2 (0.5165 m^2)
Screen Panel Area	7.71 ft^2 (0.7163 m^2)
Non-Blanked Screen Area	22.24 ft^2 (2.066 m^2)
Screen Angle	0 to +6 degree
Dimensions	
Length	126" (3,200 mm)
Width	78.5" (1,994 mm)
Height	56" (1,422 mm)
Weir Height	39.5" (1,003 mm)
Weight	
Net	6,000 lbs (2,722 kg)
Utility Requirements	
Power	7 HP / 2 x 3.5 HP (5.22 kW / 2 x 2.61 kW)
Voltage	380 / 460 V
Frequency	50 / 60 Hz
Phase	3 Phase

CORROSION PROTECTION

The Ellipse 4PDD Cascading has two layers of powder coat. The first coat is baked-on primer which provides corrosion resistance. The final coat provides abrasion resistance.