

SCREEN PULSE

Fluid and cuttings separator

APPLICATIONS

Offshore and onshore environments

BENEFITS

- Recovers maximum fluid and minimizes waste
- Reduces equipment footprint, transport, and mobilization cost
- Reduces personnel requirements, with most packages being operated and maintained by rig personnel
- Diminishes operating cost as compared to competitor solids separation technologies on the market
- Offers improved solids control
- Optimizes separation efficiency
- Retains recovered drilling fluid
- Reduces transportation and waste disposal costs
- Requires no additional equipment
- Necessitates fewer chemicals
- Provides enhanced HSE profile
- Uses existing shaker g-forces

FEATURES

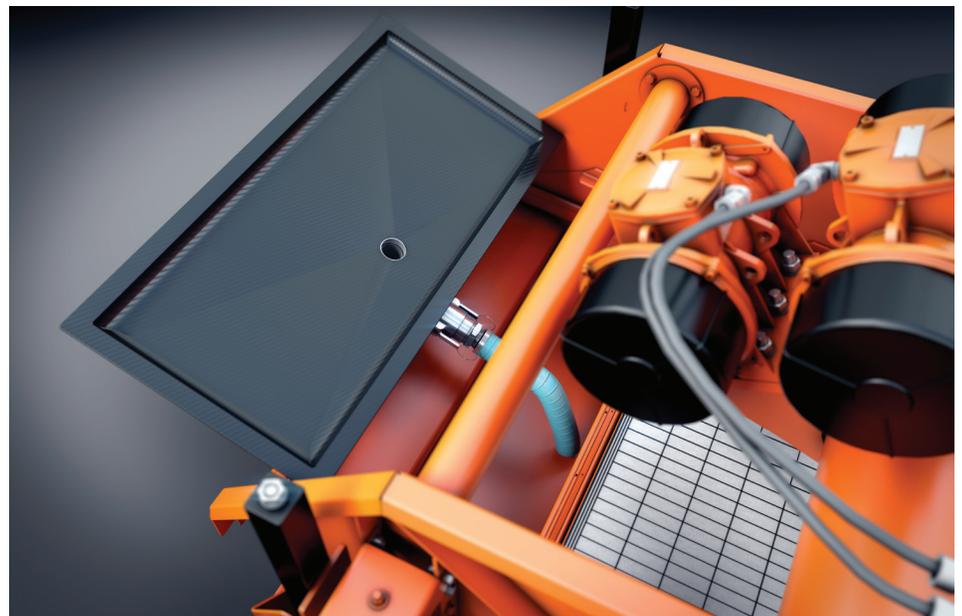
- Drop-in, weld-free design
- Compact design
- Flexible pulsating technology
- Nonelectrical, fully pneumatic system
- EPA 9095B standard compliant
- Compatible with water-based mud, oil-based mud, and synthetic-based mud

The SCREEN PULSE* fluid and cuttings separator significantly reduces liquid and sludge haul-off from the flowline shaker cuttings discharge. In contrast to conventional separators, which normally use only vibratory separation, the separator creates pulsating suction on the surface of the last shaker screen on the discharge end. Because of this, the SCREEN PULSE separator enables operators to maximize fluid recovery, minimize hauloff, and pass paint filter disposal testing without added chemical stabilization in the flowline shakers cuttings boxes. Combined with the high-capacity, long life DURAFLO* composite replacement screens from the separator produces drastically lower mud on cuttings than conventional systems.

SCREEN PULSE separator packages can be retrofitted to major brands of flow line shakers on the market without the need for field welding, crane lifts, or 24/7 personnel coverage to operate the equipment. Compatible shakers include

- MEERKAT* compact single-deck shale shaker
- MONGOOSE PT* and MONGOOSE PRO* dynamic dual-motion shale shakers
- LCM-3D In-Line 4-Panel shaker
- KING COBRA VENOM™ shaker
- DERRICK FLO-LINE CLEANER™ 500 series
- DERRICK HYPERPOOL® series.

Field proven to reduce mud on cuttings by over 35%, as compared to industry-leading shakers and screen technology, the SCREEN PULSE separator enables operators to dispose of cuttings while meeting paint filter test criteria.



SCREEN PULSE fluid and cuttings separator.

SCREEN PULSE

SCREEN PULSE separator equipment package

The SCREEN PULSE separator is temporarily attached to a shaker beneath the last screen on the discharge end. When it operates, the suction pulls all residual drilling fluid away from the cuttings. The unit maximizes the volume of recovered and reused fluids, and it provides dryer cuttings. Dryer cuttings mean less weight and lower cuttings waste volume for trucking and ship-to-shore transfer operations. These benefits will provide customers with a reduction in operational cost and NPT, as well as an enhanced HSE profile.

System components

The system consists of an air operated, pulsating control panel that operates four shakers simultaneously, and one internal shaker pan installed under the last shaker screen at the discharge end of each shaker. Exact configuration is determined by the shaker model in use. In addition, the system contains an air valve attached to the pan, and either an air compressor or a system which enables the use of rig air.

QHSE improvement and waste reduction

The SCREEN PULSE separator reduces your overall costs and elevates the QHSE profile. The simplistic design of the technology enables single-person operation, which reduces personnel risks associated with having to use multiple fluid recovery systems.

In addition, by pulling residual drilling fluids through the screen surface, the unit consistently recovers more drilling fluid than similar systems operating without the unit. These safety features reinforce the SCREEN PULSE separator as the solution for meeting increased regulatory requirements

Specifications

Shaker Model	Pan Assembly Weight, lbm [kg]	Pulse Panel Weight, lbm [kg]	Minimum Air Requirement per Shaker
MEERKAT shaker	34 [15.4]	135 [61.2]	30 ft ³ at 80 psi [0.8 m ³ at 0.6 MPa]
MONGOOSE PT and PRO shaker	34 [15.4]	135 [61.2]	30 ft ³ at 80 psi [0.8 m ³ at 0.6 MPa]
NOV KING COBRA, KING COBRA VENOM, and LCM-3D shakers	46 [20.9]	135 [61.2]]	30 ft ³ at 80 psi [0.8 m ³ at 0.6 MPa]
DERRICK FLO-LINE CLEANER 500 series and DERRICK HYPERPOOL® series	41 [18.6]	135 [61.2]	30 ft ³ at 80 psi [0.8 m ³ at 0.6 MPa]

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