

BRANDT VSM Multi-Sizer Separator

The Next Leap in Separation Technology



The VSM Multi-Sizer provides high performance and flexibility for modern day drilling operations. The balanced elliptical motion, 3-deck design offers maximum screening capacity in a compact footprint. The VSM Multi-Sizer can be operated in In-Series or In-Parallel modes, enabling for the recovery of LCM or wellbore stabilization materials or maximizing the shaker process capacity respectively. The VSM Multi-Sizer comes standard with Constant-G Control™ (CGC), a patented technology developed to maintain an optimal G-force rating and increase the shaker performance during varying liquid/solids loading conditions.

Specifications

Dimensions (L x W x H)*	90 in. x 78 in. x 68 in. (2272 mm x 1979 mm x 1719 mm)
Weir height	45 in. (1143 mm)
Max gross weight (dry)*	6,035 lbs (2,743 kg) - Feed box option
Basket angle	Fixed
Scalping deck angle	+2°
Primary deck 1 angle	+7°
Primary deck 2 angle	+7°
Total screening area	73 ft ² (6.79 m ²)
Scalping deck screening area	20.6 ft ² (1.91 m ²) - (3 screens)
Primary deck 1 screening area	26.2 ft ² (2.44 m ²) - (4 screens)
Primary deck 2 screening area	26.2 ft ² (2.44 m ²) - (4 screens)
Screen type	Pretensioned; Repairable
Screen-securing system	Pneumoseal (air-operated; quick release)
Motor type	(2) Totally enclosed non-ventilated (TENV)
Motor power (per unit)	(2) 4hp (3 kW)
Vibration motion	Balanced elliptical
Electrical requirements	380VAC/50Hz or 480VAC/60Hz 3-Phase
Compressed air requirements/capacity	80-90 psi/0.5 ft ³ /min (0.01 m ³ /min) intermittent
Certifications	ATEX zone 1

*Varies based on configuration. Please contact your NOV sales representative for specific dimension and weight information.

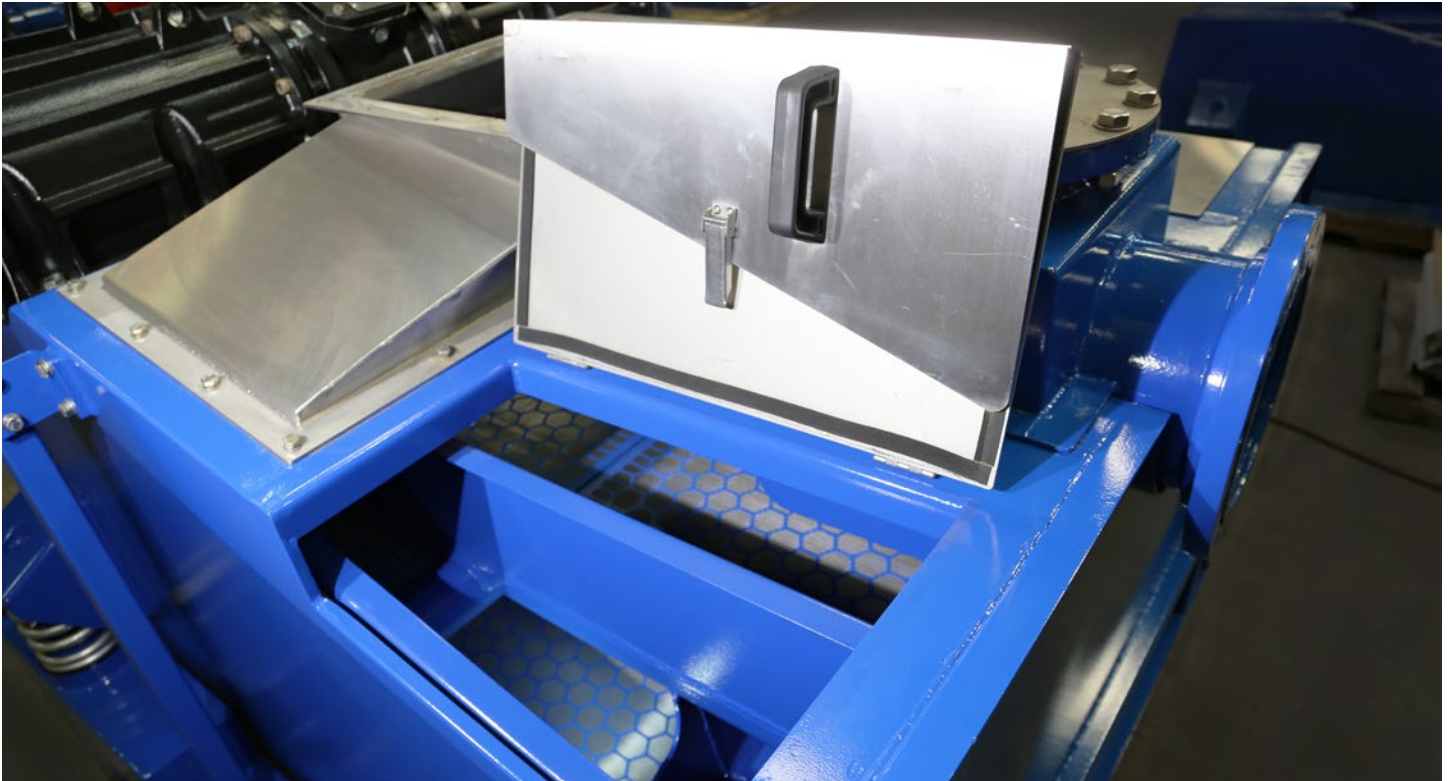
In-Series - Operating Mode

The primary function of In-Series mode, is to remove undesired solids while recovering lost circulation and/or wellbore stabilization materials. In this mode, each of the three screening decks is equipped with screens of differing API designations that allow for the recovery of desired material while discarding undesired solids. Two recovery troughs, which are integrated into the basket, collect the recovered material and route it to the sump and back into the active mud system.

In-Parallel - Operating Mode

The primary function of In-Parallel mode, is to maximize screening capacity and throughput. In this mode, the two primary decks are equipped with screens of the same API designation and simultaneously used to remove undesired solids. During In-Parallel mode, the built-in recovery trough on the end of Primary Deck 1 is closed, allowing for the discharge of solids. This trough allows the user to easily switch between collection and disposal modes, without requiring the use of special tools.

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Features

CONSTANT-G CONTROL (CGC)

Benefits

Maintains an optimum G-force rating during variable liquid/solids loading conditions. Improves flow capacity, provides constant solids conveyance, and finer screening capability.

In-parallel - operational mode

- Doubles the effective screening area for increased capacity of fine solids removal
- Allows for finer screening and higher flow rates

In-series - operational mode

- Allows for classification of solids by utilizing screens of varying API designations on each respective deck
- Allows for the recovery of designer solids, including lost circulation material (LCM)

Manual flow diverter

Allows for easy switching between In-Series and In-Parallel operational modes by a single operator with no tools required

Pneumoseal clamping and sealing system

Ensures that screens are properly secured to the shaker basket and allows for quick and easy screen changes

Three-screening decks design (scalping first primary, second primary)

Provides increased screening area, and allows for higher flow as well as classification of solids

73 ft² (6.79 m²) of screening area

Provides the highest amount of primary fine screening area on the market

Built-in recovery trough on first primary deck

Allows for easy switching between the collection and disposal of solids in the In-Series and In-Parallel modes

Balanced-elliptical motion

- Provides for the easy removal of large, sticky, hydrated clays and other troublesome solids
- Allows for improved solids conveyance in situations where reactive formations are encountered
- Minimizes solids degradation, improves screen life, and minimizes the likelihood of screen blinding

Finely tuned motor weight balancing

Ensures optimal solids conveyance by providing a consistent, balanced elliptical motion and stroke profile under varying basket-loading conditions

Vibratory drive system

Reliable, easy to maintain, low operating cost canister motor drive system

Scalping deck allows inspection of the first primary deck screens

Designed and sized to allow for quick and easy inspection of first primary deck screen's condition

Flexible feed arrangement (by either flow divider or shallow header tank)

Ensures even distribution of drilling fluid to all separators in the system

Low spare parts inventory

Provides cost savings

Fume extraction hood

Routes hazardous fumes away from the unit and into a ventilation system for safe transfer from personnel