



BRANDT VSM Multi-Sizer Separator

The Next Leap in Separation Technology

The reliable Brandt™ VSM™ Multi-Sizer separator provides high performance and flexibility for modern-day drilling practices. The VSM Multi-Sizer offers CONSTANT-G CONTROL™ (CGC), a patented technology developed to maintain an optimal G-force rating during varying liquid/solids loading conditions, as a standard feature. CGC maximizes screen performance, solids conveyance, and throughput while enhancing screen life.

Specifications

Dimensions (L x W x H)*	90 in x 78 in x 68 in (2272 mm x 19,790 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	380-480 VAC/3-Phase/50 or 60 Hz
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 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	Benefits
CONSTANT-G CONTROL (CGC)	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	<ul style="list-style-type: none">- Doubles the effective screening area for increased capacity of fine solids removal- Allows for finer screening and higher flow rates
In-series - operational mode	<ul style="list-style-type: none">- 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	<ul style="list-style-type: none">- 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	Provides a field-proven, 8-bearing drive system with cylindrical roller bearings and a short shaft design, offering unsurpassed reliability and performance
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