

BRANDT™ AX-1 Shale Shaker



BREAKING THE MOLD WITH THROUGHPUT CAPACITY AND SOLIDS SEPARATION EFFICIENCY

The AX-1 shale shaker has again proven that innovation comes not only from an unrivalled understanding of the application but also a determination to attempt what many others may consider the impossible. Representing the next generation of solids liquid separation equipment, the AX-1 shale shaker breaks the mold with respect to both raw throughput capacity and solids separation efficiency.

The AX-1 delivers the three things desired by both operator and contractor:

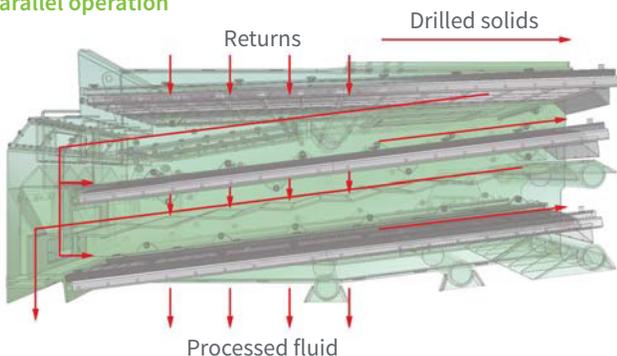
- An ability to effectively handle the large circulating rates in respect to fast, top-hole drilling.
- An ability to deliver improved separation through 'sequential' screening. This also results in improved screen life on the very fine meshes.
- A user-friendly design with low-maintenance components.

DUAL MODES

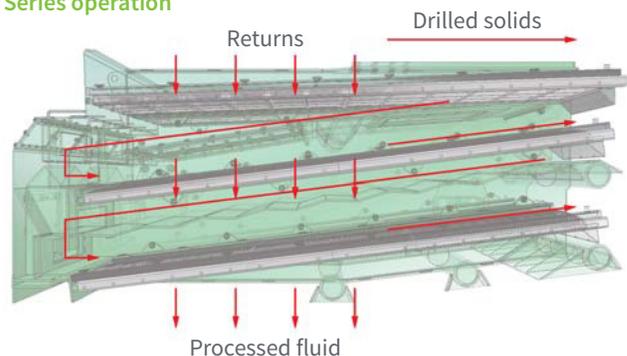
There are two easily interchangeable operational modes available, parallel or series operation. This is achievable due to the innovative triple deck layout of the AX-1 and the unique flow distribution system built into the rear of the machine.

- In parallel mode, fluid handling capacity is increased by 'load sharing' the flow between the middle and lower decks;
- In series mode the fluid is consecutively screened through the three decks – thereby optimising solids removal efficiency and the life of the ultra-fine screens employed.

Parallel operation



Series operation



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SIZED MATERIAL RETENTION™

Drilling fluids are more frequently being engineered to contain specifically sized particles. This can be either conventional lost circulation materials to combat significant downhole losses, or specifically sized material to bridge fractures and pore spaces. This allows higher fluid densities – often above the fracture gradient – to be employed.

This results in:

- Reduced whole fluid losses in depleted zones
- Reduced number of casing runs
- Increased margin of safety

The AX-1 increases the efficiency and cost-effectiveness of these fluid formulations by retaining the sized particles on the middle deck while removing the larger and finer drilled solids on the upper and lower decks.

SUMMARY OF BENEFITS

Capacity: In parallel mode AX-1 delivers around twice the throughput capacity of the current brands of dual deck shakers.

Improved Separation: When configured for ‘series’ mode, the AX-1 becomes the ultimate fine screening machine. The ability to operate sequential screen sizes improves solid/liquid separation and reduces the attrition rate on the ultra-fine screens.

Flexibility: Whilst the AX-1 offers high capacity to contend with upper hole sections, an ability to switch to ‘sequential screening’ for smaller hole sections ensures the optimum in separation efficiency when it is most required. Further flexibility is offered through SMR mode, special screens for removal of milled swarf and the option to set up the shaker for ‘offline’ processing of fluids.

Footprint: Because the AX-1 delivers such a massive throughput differential, the number of machines required can be significantly reduced – resulting in a smaller installed footprint.

Reliability: The AX-1 shaker basket structure has field-proven, ruggedised drive system components to increase up-time and reduce maintenance costs.

Screens: The AX-1 uses the massively successful AX Screening System.

Nominal Specifications and Dimensions

Dimensions (L x W x H)	3101 mm x 1870 mm x 1730 mm (single)
Weight	3547 kg
Vibratory Motion	Balanced Elliptical
Angle of Motion	Fixed
Speed of Vibration	Variable
Drive System Method	Electrically Driven; Belt Drive
Air Supply Requirements	Pressure 80 – 90 psi; Capacity 0.3 ft ² /min
Screen Configuration	Triple Deck
Screen Type	Pretensioned
Screen Clamping	Pneumatic
Screen Angles (Fixed)	Top Deck 2°; Intermediate Deck 7°; Bottom Deck 7°
Screen Area per Deck	2.01 m ² (21.64 ft ²)
Total Screen Area	6.03 m ² (64.92 ft ²)
<i>*Varies based on configuration. Please contact your NOV sales representative for specific dimension and weight information.</i>	