fax: +44 1772 690840 email: info@psdmud.co.uk



Specialist equipment to separate solids from liquids worldwide

www.solidsseparation.com

DD30 MUD CLEANER

The DD 30 mud cleaner is a compact double deck, high frequency, linear motion shaker mounted on a heavy duty frame with mud feed header box and a mud underflow sump with a discharge point on each side. The unit is complete with lifting points, electric Direct-On-Line starter and a fold-down front access platform used for screen changing. The linear motion shaker is driven by twin 1.5kW Exd Group 1 totally enclosed motors. For non-hazardous applications the unit is supplied complete with a 3-phase rotary compressor, used for inflating the screen clamping bladders. The unit is suitable for use with 50 Hz or 60 Hz supply at 380 to 440 volts.



The shaker is fitted with a hook strip removable stainless steel woven wire top screen tensioned by edge bolts. The lower deck uses 4 No. pre-tensioned screen panels and has a flat rear section and an inclined front section that forms a beach up which the solids move. This arrangement allows a considerable depth of mud and cuttings at the rear of the machine and for a long length of beach for the drying of the cuttings. The panels used on the lower deck are factory prepared, pre-tensioned screens with apertures ranging from 20 mesh to 325 mesh. The screens are clamped into place by pneumatic bladders, which require an air supply of 4 to 7 bar but with negligible flow. The main screens can be removed and replaced very quickly indeed without any tools or spanners.

The combination of the efficient top deck scalping screen, special pre-tensioned screen panels, the large depth of submergence of the rear panels, the sloping front deck and the high frequency angled linear vibrations allows the shaker to achieve very high throughputs and to operate with much finer screens than would otherwise be the case. This type of shaker has been developed for and is widely used in the oil and gas

industries where efficiency and quality of operation are closely observed and monitored. The introduction of these high efficiency shakers to the civil engineering rental market now allows the same high standards of mud cleaning and solids separation to be achieved in this industry as was previously reserved for operators in the North Sea and other international oilfields.

DD30s may be operated as single or as twin units and are suitable for applications ranging from mud cleaning for on-shore oil and gas exploration and production drilling through bentonite piling and small diameter full face slurry shield tunnelling to directional drilling and valued product dewatering.

The upper deck is 2' 6" (750 mm) wide by 6' 0" (1800 mm) long and is usually fitted with screens of 8 to 30 mesh. The lower deck has 4 No. panels, each 2' 0" (600 mm) wide by 3' 0" (900 mm) long, with apertures of 20 mesh to 325 mesh. Throughput of the unit will depend upon solids content, solids size, mud viscosity and rheology but in civil engineering applications using bentonite based muds flowrates of up to 30m³/hr and solids removal rates of up to 10 tonnes/hour can been achieved. Flowrate throughput depends upon screen aperture size. For very fine screens the flowrate may be reduced. Screens of 165 mesh or finer can remove sand sized particles thereby providing very efficient cleaning.

TECHNICAL DATA:

Power: 380 to 440V, 50 Hz (or 60Hz with prior arrangement).

Running current: 11A per phase. **Starting current:** 50A per phase.

Generator: A 25KVA generator would normally be suitable to run this machine.

Overall size: 2350x1870x1500mm high.

Weight: 3 tonnes.

Process capacity: Up to 30m³/hr with low viscosity fluids.

Solids removal rate: Up to 10 tonnes/hr of suitably sized solids.

Mud feed: At the rear of the machine.

Solids discharge: From upper & lower decks at the front of the machine on to the ground or into client's skip.

Fluids discharge: Via the underflow tank beneath the shaker to low level outlets at either side.

Noise emissions: 65dB at 5m.