## PIGOTT SHAFT DRILLING LIMITED

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Specialist equipment to separate solids from liquids worldwide

## **BRANDT SHAKER**

The BRANDT shaker is a small, lightweight, compact double deck shaker used for the primary separation of solids from drilling and circulation fluids used for micro-tunnelling, pipejacking and directional drilling. When fitted with coarse screens the machine will handle flowrates of up to 180m³/hr and will separate up to 15 tonnes per hour of suitably sized solids. For finer mesh screens the flowrate and solids handling capacity are reduced.

The unit consists of an orbital motion, double deck shaker carried on vibration reducing rubber mounts fitted to a hollow section steel frame which also carries the mud feed header box and the electric motor used to drive the shaker. The machine measures 2025x1760x1000mm high and weighs 1.2 tonnes.

The decks are dressed with hook strip stainless steel screens, each 5' (1.5 m) long by 4' (1.2 m) wide. Normally the top deck carries a screen of coarser mesh than the lower deck. Screens are available with mesh sizes from 4 mesh to 100 mesh. Fluid feed to the unit is at the rear of the header box by way of a 6" pipe fitted with a Victaulic shouldered coupling.

A 4kW, 4 pole, foot mounted 415 Volt, 50Hz electric motor with direct-on-line starting drives the shaker through belts. The vibration is caused by the rotation of out of balance weights set on both sides of the shaker frame. The unit is very simple to set up and operate, only requiring the connection of electric power and mud feed pipework. Normally the unit would be used set on top of a tank. The separated solids would be discharged from the front of the screens and would fall down the face of the tank onto the ground or into skips. The fluids would flow through the screens and fall into the tank below for storage or re-use.



## **TECHNICAL DATA**

Fluid throughput capacity: up to 180m<sup>3</sup>/hr of low viscosity fluid when coarse screens are used.

Solids removal rate: up to 15 tonnes per hour of suitably sized material. Lower solids removal rates are

achieved when the equipment is fitted with small aperture screens.

**Transport size:** 2025x1760x1000mm high

Weight: 1.2 tonnes

Operating size: 2025x1760x1000mm high. The shaker is normally mounted above a tank which is also

used for the collection and storage of screened fluid.

**Mud feed:** 6" pipe, with Victaulic shouldered coupling, at the rear of the header box.

**Solids discharge:** off the front of each deck.

**Fluid discharge:** by gravity, to the space or the tank below.

**Power:** 415 volts, 50 Hz, 3 phase and earth. No neutral is required. Starting current for the drive

motor is 54 amps. Full running current is 8 amps per phase. Normally a 20KVA generator

would be sufficient to operate this equipment.