

SS150DP DESANDER

The SS150DP is a compact high performance desander for use as a primary mud cleaner for civil engineering, slurry shield and directional drilling applications. It will process flow rates of up to 150m³/hr and will separate coarse and medium sized sands from the mud. The SS150DP consists of two modules, the pump tank module and the shaker module. The pump tank module, which is 3458mm long by 2438mm wide and 2591mm high, weighs 6 tonnes and houses the hydrocyclone feed pump, a centrifugal pump for the discharge of the cleaned mud and a lockable stores compartment with electrical controls, complete with 15m long power cable. The shaker module is 2600mm long by 2438mm wide by 2591mm high, it weighs 5 tonnes and houses 2 No. 10" long bodied hydrocyclones mounted over a shaker, which is fitted with a primary screen used to screen all of the fluid and a secondary screen used to de-water the underflow from the hydrocyclones. The two pieces fit together for transport to form a 20 foot container sized load complete with twistlocks. The overall size for transport is 6058x2438x2591mm high. The weight of the whole unit is 11 tonnes. For operation the two units are separated and the shaker/hydrocyclone module is placed on top of the pump tank unit. The working footprint is 3.5x2.5x5.2m high. Solids discharge is on the 3.5m front face. Access to the two pumps, the electrical connections and to the stores compartment is from the rear of the machine.

The dirty mud, which is supplied to the machine, passes through a riser pipe to the lower deck of the shaker. After primary screening the mud falls into the pump tank below from where it is pumped by a 30kW centrifugal pump to the hydrocyclone inlets. The underflow from the hydrocyclones is discharged on to the top deck of the shaker for dewatering. This is normally dressed with 0.3x12mm slotted aperture, polyurethane screens. The hydrocyclone overflow flows into the pump tank where some is recycled and some is passed to the clean mud discharge pump for transfer to the next stage of mud treatment or for reuse.

The SS150DP is fitted with work platforms and safety rails. It is complete with all necessary electrical controls with star-delta starting for the motors for the hydrocyclone feed pump and for the 30kW discharge pump. A small secure stores compartment is built in to the pump tank module. A 15m long main electrical supply cable is fitted to the unit. The unit requires an electric supply of 415V, 3-phase, 50Hz capable of sustaining a running current of 120A.



TECHNICAL DATA

Shaker module:

Size: 2600x2438x2591mm high, with twistlock castings **Weight:** 5 tonnes.
Shaker: 2 No. shaker motors of 4kW each, Direct-On-Line starting.

Pump tank module:

Size: 3458x2438x2591mm high, with twistlock castings **Weight:** 6 tonnes.

Hydrocyclone feed pump: 1 No. Denver 150x100 centrifugal with 30kW motor

Clean mud discharge pump: 1 No. Denver 150x100 centrifugal with 30kW motor.

Transport size: 6058x2438x2591mm high, with twistlock castings **Transport weight:** 11 tonnes
 The machine can be transported as one standard type 1CC container.

Operating size: 3500x2500x5200mm high. **Operating weight:** 20 tonnes wet.

Power: 380-415V, 50Hz, 3-phase and earth no neutral is required.

Running current: 120A. **Starting current:** 240A per phase.

Generator: Normally a 100KVA generator would be required to run this machine.

Lighting & small tools: 1 No. 220V, 3kW, single-phase transformer for lighting and small tools.

Other: 3 No. 32A, 3-phase sockets.

Fluid throughput capacity: upto 150m³/hr of mud having a Marsh Funnel viscosity of <100 seconds per U.S. Quart.

Solids removal rate: up to 25 tonnes/hr of coarse to medium sand.

Noise emissions: 72dB at 5m.