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Specialist equipment to separate solids from liquids worldwide

SUPERCLEAN® 200DP



The SUPERCLEAN® 200DP (SC200DP) is a very versatile high-performance mud cleaner that can be used in a wide variety of applications in the civil engineering, diaphragm walling, tunnelling, and drilling industries. The machine will handle a flowrate of up to 200m³/hr of mud having a Marsh Funnel viscosity of less than 70 seconds per U.S. Quart. The machine consists of two parts, a shaker module, and a pump tank module. In use the shaker module mounts directly above the pump tank module. The site footprint is 6.1m x 3.4m with an overall height of 5.2m.

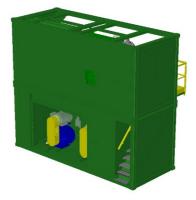
The shaker module houses a steeply declined double deck, linear motion, primary shaker. The decks can be dressed with either wedge wire or woven wire hook-strip screens dependent on the prevailing ground conditions, which can be used for the separation of rocks, gravels, clayballs, large pieces of timber and roots etc. The primary shaker motors have three pre-set speeds, which can be adjusted via the pendant control to suit ground conditions. The shaker module also has mounted within it, 12 No. long bodied 5" desilting

hydrocyclones and a high speed, linear motion secondary shaker used for the dewatering of the underflow from these hydrocyclones. This shaker has two inclined decks, each using 4 No. pretensioned, woven wire stainless steel screen panels, which are held in place by a pneumatic clamping system. The time required to change a set of screens with this clamping system is usually just a few minutes and this makes the machine suitable for use when processing a wide variety of soil types. The top deck would usually be dressed with API 60 screens, and the lower deck with much finer screens of API 140 or API 170, and even finer if necessary.

The primary shaker will separate up to 30 tonnes per hour of oversized solids, the hydrocyclone underflow de-watering shaker will handle up to 25 tonnes per hour of suitable solids with the appropriate screens fitted to the shaker.

Each of the two modules of the SC200DP is built to the dimensions of a type 1CC 20-foot freight container, complete with ISO corner castings, which makes them easy to transport and handle on site. The shaker module has a heavy-duty hollow section frame, permanently enclosed on three sides and with a roof clad in marine quality plywood. A tarpaulin is fitted to the front in order to provide weather protection to the equipment and operator.

The pump tank module incorporates an internal staircase, control room with electrical panels and a small compressor. The tank unit houses some tank compartments and two Metso centrifugal pumps, one is used to supply mud to the 5" desilting hydrocyclones and the other pump is inverter controlled and is used for the discharge of the cleaned mud from the unit.



TECHNICAL DATA

Fluid throughput capacity: Solids removal rate, up to: Transport size:	
•	The machine can be transported as two standard type 1CC containers.
Weight:	Pump tank at 10 tonnes plus isolating transformer if fitted, shaker module at 10 tonnes.
Operating size:	6058mm (L) x 3365mm (W) x 5200mm (H)
Power:	415V, 50Hz, 3 phase and earth no neutral is required.
Running current:	up to 200A. Starting current: 453A per phase.
Generator:	Normally a 180kVA generator would be required to run this machine.
Desilting feed pump:	Metso MM200 centrifugal with 55kW motor with star-delta starting.
Discharge pump:	Metso MM200 centrifugal with 30kW motor with inverter control.
Primary shaker:	2 No. 0.90kW motors with inverter control.
Secondary shaker:	2 No. 4kW motors with inverter control.
Compressor:	3kW motor with direct-on-line starting.
Lighting & small tools:	1 No. 220V, 3kW, single phase transformer for lighting and small tools.
Noise emission:	74 dB at 5m.