

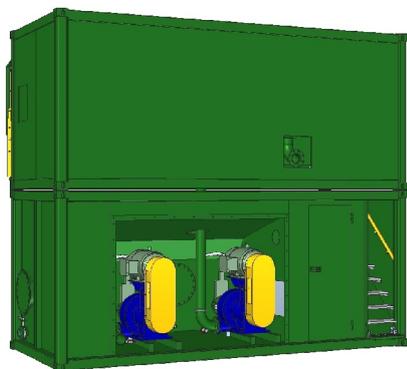
SUPERCLEAN® 160DP

The SUPERCLEAN® 160DP (SC160DP) 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 160m³/hr of mud having a Marsh Funnel viscosity of less than 100 seconds per U.S. Quart. The machine consists of two parts, a shaker module and a pump tank module, with the shaker module mounting directly above the pump tank module when in use. The site footprint is approximately 6m x 2.5m with an overall height of 5.2m and access is required at the rear face where the pumps are located.



The shaker module houses a double deck, orbital motion, primary shaker, which is usually dressed with woven wire screens for the separation of rocks, gravels, large pieces of timber and roots etc. The top deck would normally be dressed with a 4 mesh screen and the bottom deck with a 10 mesh screen. Also mounted within the shaker module are 8 No. long bodied 5" desilting hydrocyclones and a VSM100 high speed, linear motion shaker, which is used for the dewatering of the underflow from the hydrocyclones. This shaker has a partially inclined deck which uses 4 No. pre-tensioned, woven stainless steel wire screen panels which are held in place by a pneumatic clamping system, which enables screens to be changed in just a few minutes, making the machine suitable for processing a wide variety of soil types. The shaker would usually be dressed with screens of between 84 and 200, depending in the ground conditions and the dryness of solids required. Further alterations to the performance of the SC160DP can be made by fitting hydrocyclone spigots of different diameters to control the wetness and particle size of the hydrocyclone underflow

The primary shaker is capable of separating up to 20t/hr of solids and the VSM100 shaker can remove up to 18t/hr of suitable solids with the appropriate screens fitted.



Each of the two modules of the SC160DP is built to the dimensions of a type 1CC 20 foot freight container, complete with ISO corner castings, making 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 plywood. A fold-down work platform above the front discharge face is fitted with a tarpaulin providing weather protection to the equipment and operator.

The pump tank module incorporates an internal staircase and a control room with electrical panels, discharge pump inverter and a small compressor. The tank unit houses two Metso centrifugal pumps, one is used to supply mud to the 5" hydrocyclones and the other pump is inverter controlled and is used for the discharge of the cleaned mud from the unit. The SC160DP is supplied with a 15m power cable and either 4" or 6" inlet and outlet connections for process fluid.

TECHNICAL DATA

Fluid throughput capacity:	up to 160m ³ /hr of mud having a Marsh Funnel viscosity of <100 seconds per U.S. Quart.
Solids removal rate, up to:	20t/hr on the primary shaker and 18t/hr on the secondary shaker.
Transport size:	2 No. units each 6058x2438x2591mm high, complete with twistlock corner castings The machine can be transported as two standard type 1CC containers.
Weight:	Pump tank at 9 tonnes, shaker module at 10 tonnes.
Operating size:	6058x4000x5200mm high.
Power:	415V, 50Hz, 3 phase and earth no neutral is required.
Running current:	up to 140A. Starting current: 340A per phase.
Generator:	Normally a 150KVA generator would be required to run this machine.
Desilting feed pump:	Metso MM200 centrifugal with 45kW motor with star-delta starting.
Discharge pump:	Metso MM200 centrifugal with 30kW motor with inverter control.
Primary shaker:	1 No. 4kW motor with direct-on-line starting.
Secondary shaker:	2 No. 2kW motors with direct-on-line starting.
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:	75 dB at 5m.