

SUPERCLEAN® 160DP

The SUPERCLEAN® 160DP (SC160DP) is a versatile, high-performance, all-in-one separation plant with integral discharge pump, that can be used in a wide variety of applications in the civil engineering industry, including but not limited to HDD, diaphragm walling, tunnelling and piling. With simplicity of design and operation and a fluid throughput of 160m³/hr, the SC160DP is most suitable to low-cohesion ground conditions including, gravels, sand and silt.



TECHNICAL DATA

Maximum fluid throughput capacity: 160m³/hr (of slurry having a Marsh Funnel viscosity of less than 70 seconds per U.S. Quart).

Maximum solids removal rate: Up to 20t/hr on the primary shaker and 18 t/hr on the secondary shaker depending on the characteristics of the solids.

Stage 1: Dirty fluid is fed onto the top deck coarse mesh scalping screen of the primary shaker. The fluid and passing solids then fall directly onto the lower, finer mesh scalping screen. This scalping shaker is used for the separation of gravels, timber and other large solids.

Stage 2: 8 No. 5" diameter long-bodied desilting hydrocyclones, with the underflow partially dewatered by high speed, linear motion, partially inclined single deck secondary shaker, for the separation of fine gravels, sand and some silt that pass through the primary screens.

Primary shaker: Orbital motion, horizontal, double deck scalping shaker, mounted on isolation rubbers.

Primary shaker top deck screens: 1 No. woven wire 4-mesh screen (aperture approx. 4.75 x 4.75mm).

Total screen area: 1.8m² (1.2m wide by 1.5m long)

Primary shaker bottom deck screens: 1 No. woven wire 10-mesh screen (aperture approx. 2 x 2mm).

Total screen area: 1.8m² (1.2m wide by 1.5m long)

Secondary shaker: High speed, linear motion, partially inclined single deck shaker, mounted on isolation springs. Quickly interchangeable screens with pneumatic clamping system.

Secondary shaker screens: 4 No. pre-tensioned woven stainless steel wire screens (API100, API140 or API170 options available to suit prevailing ground conditions).

Transport size: 2 No. units each 6058x2438x2591mm (1CC container size), complete with ISO corner castings.

Weight (dry): Pump tank at 9 tonnes, shaker module at 9 tonnes.

Operating weight (wet): Up to 31 tonnes.

Operating size: 6058mm (L) x 3365mm (W) x 5200mm (H).

Access to shaker module: Via internal staircase.

Power: 85kW installed power running at 380-415V, 50Hz, 3 phase and earth (no neutral required).

Estimated running current: 101A per phase.

Estimated starting current: 225A per phase.

5" hydrocyclone feed pump: Metso MM200 centrifugal, with overhead mounted, star-delta started, 45kW motor.

Discharge pump: Metso MM200 centrifugal, with overhead mounted, inverter controlled, 30kW motor.

Primary shaker: 1 No. 4kW motor with direct-on-line starting.

Secondary shaker: 2 No. 1.65kW motors with direct-on-line starting.

Compressor: 1.1kW with 50L receiver and direct-on-line starting.

Noise emission: 75 dB at 5m.