PIGOTT SHAFT DRILLING LIMITED
tel: +44 1772 690076
email: info@psdmud.co.uk

Specialist equipment to separate solids from liquids worldwide

www.solidsseparation.com

SUPERCLEAN® 200DP

The SUPERCLEAN® 200DP (SC200DP) 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. The SC200DP can handle a fluid throughput of up to 200m³/hr, and is suitable for use in a broad range of ground conditions, thanks to its adjustable speed, double-deck steeply declined primary scalping shaker proficient in handling cohesive clayballs, and 12 No. long-bodied 5" diameter desilting hydrocyclones coupled with the high performance PSD300 double-deck secondary shaker.

TECHNICAL DATA

Maximum fluid throughput capacity:	Up to 200m³/hr (of slurry having a Marsh Funnel viscosity of less than 70 seconds per U.S. Quart).
Maximum solids removal rate:	Up to 25 t/hr on the primary shaker and 25 t/hr on the secondary shaker depending on the characteristics of the solids.
Stage 1:	Dirty fluid is fed onto the top deck in-flow stainless steel wedge wire screens of the linear motion 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 cohesive clay balls.
Stage 2:	12 No. 5" diameter long-bodied desilting hydrocyclones, with the underflow partially dewatered by high speed, linear motion, partially inclined double-deck secondary shaker, for the separation of fine gravels, sand and some silt that pass through the primary screen.
Primary shaker:	Linear motion, steeply declined, double deck PSD200 scalping shaker, with adjustable shaker speed, mounted on isolation springs.
Primary shaker top deck screens:	3 No. In-flow 5mm aperture stainless steel wedge wire hook strip screens. Total screen area: 1.92m² (1.2m wide by 1.6m long)
Primary shaker bottom deck screens:	3 No. woven wire 9-mesh (aperture approx. 2mm) hook strip screens. Total screen area: 1.92m² (1.2m wide by 1.6m long)
Secondary shaker:	High capacity, high speed, linear motion, partially inclined, double deck PSD300 shaker, mounted on isolation springs. Quickly interchangeable screens with pneumatic clamping system.
Secondary shaker top deck screens:	4 No. pre-tensioned woven stainless steel wire screens, API 60. Total screen area: 2.21m² (1.3m wide by 1.7m long)
Secondary shaker bottom deck screens:	4 No. interchangeable pre-tensioned woven stainless steel wire screens (API 100, API 140 or API 170 options available to suit prevailing ground conditions). Total screen area: 2.21m² (1.3m wide by 1.7m long)
Transport size:	2 No. units each 6058x2438x2591mm (1CC container size), complete with ISO corner castings.
Weight (dry):	Pump tank at 10 tonnes, shaker module at 10 tonnes.
Operating weight (wet):	Up to 33 tonnes.
Operating size:	6058mm (L) x 3365mm (W) x 5200mm (H).
Access to shaker module:	Via internal staircase.
Power:	97kW installed power running at 380-415V, 50Hz, 3 phase and earth (no neutral required).
Estimated running current:	107A per phase.
Estimated starting current:	277A per phase.
5" hydrocyclone feed pump:	Metso MM200 centrifugal, with overhead mounted, star-delta started, 55kW motor.
Discharge pump:	Metso MM200 centrifugal, with overhead mounted, inverter controlled, 30kW motor.
Primary shaker:	2 No. 0.9kW motors with inverter control.
Secondary shaker:	2 No. 4kW motors with inverter control.
Compressor:	1.1kW with 50L receiver and direct-on-line starting.
Noise emission:	74 dB at 5m