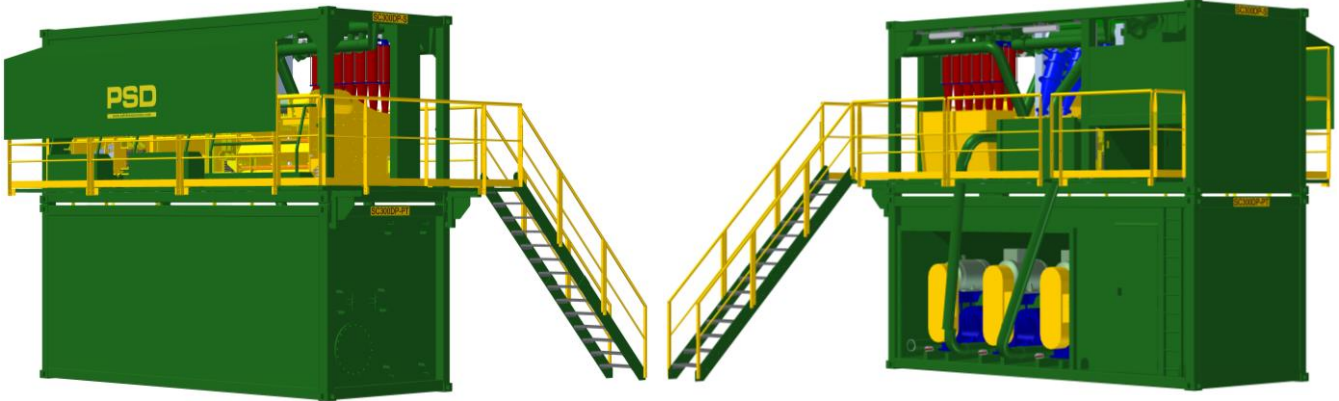


SUPERCLEAN® 300DP

The SUPERCLEAN® 300DP (SC300DP) is PSD's flagship compact separation plant, with a high fluid throughput and unmatched solids handling capacity for its footprint. The SC300DP is a versatile 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, piling and soil washing. The SC300DP can handle a fluid throughput of up to 300m³/hr, and is suitable for use in a broad range of ground conditions, thanks to its three stage design, featuring steeply declined primary scalping shaker proficient in handling cohesive clayballs, 3 No. 10" diameter desanding hydrocyclones, and 12 No. 5" diameter long-bodied desilting hydrocyclones coupled with the high performance PSD300 double-deck tertiary shaker.



TECHNICAL DATA

Maximum fluid throughput capacity:	Up to 300m ³ /hr (of slurry having a Marsh Funnel viscosity of less than 70 seconds per U.S. Quart).
Maximum solids removal rate:	Up to 40t/hr on the primary shaker, 25t/hr on the secondary shaker and 25t/hr on the tertiary shaker.
Stage 1:	Dirty fluid is fed onto the in flow stainless steel wedge wire screens of the steeply declined primary scalping shaker, for the separation of gravels, large pieces of timber and cohesive clay balls.
Stage 2:	3 No. 10" diameter desanding hydrocyclones, with the underflow partially dewatered by the secondary shaker, for the separation fine gravels and coarse/medium sands.
Stage 3:	12 No. 5" diameter long-bodied desilting hydrocyclones, with the underflow partially dewatered by the high capacity tertiary shaker, for the separation of fine sands and some silt.
Primary shaker:	Linear motion, steeply declined, single deck scalping screen mounted on isolation springs.
Primary shaker screens:	4 No. steel framed, stainless steel, in-flow 5mm aperture wedge wire screens. Total screen area: 2.16m ² (0.9m wide by 2.4m long)
Secondary shaker:	Linear motion, partially inclined, single deck mounted on isolation springs.
Secondary shaker screens:	3 No. steel framed, stainless steel, cross-flow 500µm aperture wedge wire screens. Total screen area: 1.8m ² (1m wide by 1.8m long)
Tertiary shaker:	High capacity, high speed, linear motion, partially inclined, double deck PSD300 shaker, mounted on isolation springs. Quickly interchangeable screens with pneumatic clamping system.
Tertiary shaker top deck screens:	4 No. pre-tensioned woven stainless steel wire screens, API 60 Total screen area: 2.21m ² (1.3m wide by 1.7m long)
Tertiary 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: 2.21m ² (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 12 tonnes, shaker module at 12 tonnes.
Operating weight (wet):	Up to 37 tonnes.
Operating size:	6730mm (L) x 6850mm (W) x 5200mm (H), including staircase.
Access to shaker module:	Via external staircase
Power:	160kW installed power running at 380-415V, 50Hz, 3 phase and earth (no neutral required). 194A per phase.
Estimated running current:	364A per phase.
Estimated starting current:	364A per phase.
10" hydrocyclone feed pump:	Metso MM200 centrifugal, with overhead mounted, star-delta started, 55kW motor.
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. 2.3kW motors with Inverter control.
Secondary shaker:	2 No. 2.3kW motors with direct-on-line starting.
Tertiary 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