

## SD1000DP & SM500PSDP

The SD1000DP and single SM500PSDP combine to form a high capacity desanding plant suitable for use in a wide variety of applications in the civil engineering industry, including but not limited to diaphragm walling, tunnelling and piling. The steeply declined scalping screen of the SD1000DP shaker, can be dressed with polyurethane or stainless steel wedge wire screens for proficient handling of cobbles, coarse to medium gravels and even clay balls. The large screen area of the SM500PSDP dressed with fine stainless steel wedge wire screens, is ideally suited for removing the fine gravels and coarse sands separated by the large 660 hydrocyclone and the sand and silt sized particles separated by the 5" hydrocyclones.



### TECHNICAL DATA

<b>Maximum fluid throughput capacity:</b>	500m <sup>3</sup> /hr (of slurry having a Marsh Funnel viscosity of less than 70 seconds per U.S. Quart)
<b>Maximum solids removal rate:</b>	150t/hr on the SD1000DP and 100 t/hr on the SM500PSDP
<b>Stage 1:</b>	Dirty fluid fed via header box onto SD1000DP declined scalping screen for the separation of cobbles, coarse/medium gravels, clay balls, timber, etc.
<b>Stage 2:</b>	1 No. 660mm diameter coarse desanding hydrocyclone, with the underflow partially dewatered by the SM500PSDP shaker, for the separation of medium/fine gravels and coarse/medium sands.
<b>Stage 3:</b>	18 or 20 No. 5" diameter desilting hydrocyclones, with the underflow partially dewatered by the SM500PSDP shaker, for the separation of medium/fine sands and some silt.
<b>SD1000DP shaker:</b>	Linear motion, steeply declined, single deck scalping screen mounted on isolation springs.
<b>SD1000DP shaker screens:</b>	Screens can be selected to suit material to be separated, but can include: Polyurethane, steel framed in flow or chevron stainless steel wedge wire or steel framed perforated mesh. Total screen area: 6.7m <sup>2</sup> (1.4 m wide by 4.8 metres long)
<b>SM500PSDP shaker:</b>	Linear motion, partially inclined, single deck shaker with adjustable solids discharge weir, mounted on springs.
<b>SM500PSDP shaker screens:</b>	Steel framed 500µm stainless steel, cross flow, wedge wire screens. Total screen area: 8.64m <sup>2</sup> (1.8 m wide by 4.8 m long)
<b>Transport size:</b>	4 No. units each 6058x2438x2591mm (1CC container size), complete with ISO corner castings, plus separate ancillary items: platforms, safety handrails, 660 hydrocyclone, pipework and hoses.
<b>Weight (dry):</b>	SD1000DP - pump tank at 9 tonnes, shaker module at 9 tonnes. SM500PSDP – pump tank at 11 tonnes, shaker module at 12 tonnes.
<b>Operating weight (wet):</b>	Up to 68 tonnes
<b>Operating size:</b>	Typically 7390mm (L) x 9860mm (W) x 7850mm (H) including platforms and staircase
<b>Access to top level:</b>	External staircase
<b>Power:</b>	SD1000DP - 69kW installed power, SM500PSDP – 168kW installed power. Both running at 380-415V, 50Hz, 3 phase and earth no neutral is required.
<b>Estimated running current:</b>	SD1000DP - 88A per phase (288A max starting). SM500PSDP – 193A per phase (341A max starting).
<b>660mm hydrocyclone feed pump:</b>	Metso MM200 centrifugal with overhead mounted star/delta started 55kW motor.
<b>5" hydrocyclone feed pumps:</b>	Metso MM200 centrifugal with overhead mounted star/delta started 45kW motor.
<b>Discharge pump:</b>	Metso MM200 centrifugal with overhead mounted 55kW motor with inverter control.
<b>SD1000DP shaker:</b>	2 No. 6.2kW motors with direct-on-line starting.
<b>SM500PSDP shaker:</b>	2 No. 11kW motors with direct-on-line starting.
<b>Noise emission:</b>	74 dB at 5m