

SEDIMENTATION TANK

PSD's Sedimentation Tanks are designed to encourage the separation of dense particles from fluids and are often used in conjunction with a flocculation system and S4DP Centrifuge. Flocculated process fluid is fed to the Sedimentation Tank where flocculated solids settle towards the low-level outlets and low solids content fluid passes over a system of weirs to high-level discharge pipework. Fluid with a high solids content is extracted from the low-level outlets and fed to a centrifuge for dewatering. The use of a Sedimentation Tank in conjunction with an S4DP Centrifuge can enable flow rates of up to 150m³/hr of process fluid to be treated.

The Sedimentation Tank is based on a standard type 1CC, 20 foot freight container and is complete with ISO corner castings. The main section of the tank is mounted within a heavy-duty hollow section steel frame measuring 6058x2438x2591mm high and when the bolt-on side pieces are in place for operation, the tank measures 6058x4985x2710mm high. Each bolt-on side piece is fitted with hollow section stiffeners and heavy duty lifting eyes.



The unit is fitted with an electro-hydraulic power pack with 4kW motor driving a low speed, high torque Staffa motor, which turns a vertical shaft agitator. The agitator is equipped with low and mid level blade assemblies. A fixed ladder provides access to flowforge decking on the upper surface.

For transport, the main section of the tank can be shipped as a type 1CC freight container, after removal of the bolt-on side pieces.

TECHNICAL DATA:

Power:	380 to 415V, 50 Hz. 4kW electric motor with direct-on-line starting. Supplied with 15m of 25mm ² steel wire armoured 3-phase and earth power cable.
Running current:	8A per phase.
Overall size:	For transit: 6058x2438x2591mm high plus 2 No. bolt-on side pieces. For work: 6058x4985x2710mm high.
Weight:	Dry for transit: 7 Tonnes. Wet for work: 32 Tonnes.
Volume & capacity:	Process capacity: Up to 150m ³ /hr. Process volume: 24.5m ³ . Storage volume: 30m ³ .
Fluid feed:	2 No. mid-level 6" flanged inlets. 1 No. mid-level 4" flanged inlet.
Fluids discharge:	8 No. high-level 6" flanged outlets for low solids content fluid. 2 No. low-level 4" flanged outlets for high solids content fluid.
Auxiliary pipework:	Mid-level valved 2" female Bauer inlet. 2 No. mid-level 4" flanged outlets for recirculation.