

# Settling Tank

## Flanged Execution Deep Cone



### Use

- The flanged-sector, static, vertical settling tank is the main unit for the removal of suspended solids from dirty water for high capacity plants. Acting as a decanter, it guarantees the optimal quality of purified water, in full compliance with quality standards required by the system to operate in a closed circuit
- Its vertical construction makes it possible to reduce the ecological footprint of the installation. Due to its high hydraulic head and intrinsic geometry, the system allows for sufficient thickening of the sludge in the conical part, and its evacuation without any mechanical moving parts eliminating unnecessary maintenance and consumption of electricity
- A high hydraulic head allows the water to be sent to storage or the final receiver by gravity, avoiding the installation of dedicated pumps. The high sludge storage capacity within the purifier makes it possible to significantly reduce the volume of the sludge tank and cope with any production peaks

### Main Characteristics and Accessories

- Structured with flanged sectors in top-quality, high-thickness carbon steel sheeting, sanded or pickled and without calamine, galvanized or painted with a double base coat of epoxy primer and a further coat of polyurethane top coat on the outside parts
- Set of fasteners and special sealing gaskets for assembly of the flanged sectors
- Turbid central water feed chamber complete with distribution cone and supporting props
- Peripheral overflow conduit for evacuation of the purified water
- Provision for couplings for turbid water input piping, purified water output piping and cone washing system.
- Manual shut-off gate valve with double-pneumatic control for discharge of sludge
- Provision for installation of automatic flocculant dosing system (SADF)
- Provision for installation of automatic sludge/water interface level measurement (LEM)
- Rope ladder for access to the upper part of the purifier pursuant to current regulations
- Upper walkway for inspection of the purifier in accordance with current regulations
- Heat insulation composed of thermostatically controlled resistance, aluminum and rock wool shell (optional)

### Physical/Operating Characteristics

Dimension	Imperial	Metric
Volume	1,413 - 28,252 ft <sup>3</sup>	40 - 800 m <sup>3</sup>
Diameter	11.5 - 26 ft	3.5 - 8 m
Height	26 - 59 ft	8 - 18 m
Input flow rate of water to be treated	4,238 - 21,189 ft <sup>3</sup> /h	120 - 600 m <sup>3</sup> /h
Empty weight	11,023 - 88,182 lb	5,000 - 40,000 kg
Full load weight	176,370 - 2,204,623 lb	80,000 - 1,000,000 kg