

## CONVENTIONAL CLARIFIER



Clarifiers are settling tanks built with mechanical means for continuous removal of solids being deposited by sedimentation.[1] A clarifier is generally used to remove solid particulates or suspended solids from liquid for clarification and/or thickening. Inside the clarifier, solid contaminants will settle down to the bottom of the tank where it is collected by a scraper mechanism.[2] Concentrated impurities, discharged from the bottom of the tank, are known as sludge, while the particles that float to the surface of the liquid are called scum.

1. **Scum Removal:** Removes scum buildup from within the feedwell and from the clarifier surface.
2. **Basin Configuration:** Uses deeper side water depth (SWD) and proper floor slope design for maximum capacity and highest effluent quality for the least cost.
3. **Density Current Baffle:** Eliminates wall currents and prevents short-circuiting. The wall-mounted baffle is low in cost and requires no maintenance.
4. **Flocculating Feedwell:** Promotes hydraulic flocculation in the inlet area and is designed to eliminate scouring of the sludge blanket.
5. **Energy Dissipating Inlet (EDI):** Converts the high energy feed from the center column into a lower velocity flow that is gently mixed in an impinged or tangential flow into the flocculating feedwell to maximize flocculation.
6. **Center Column:** Minimizes floc shearing and reduces influent energy. bottom of the tank, are known as sludge, while the particles that float to the surface of the liquid are called scum.