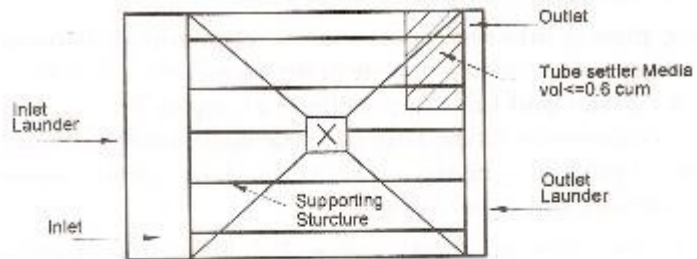
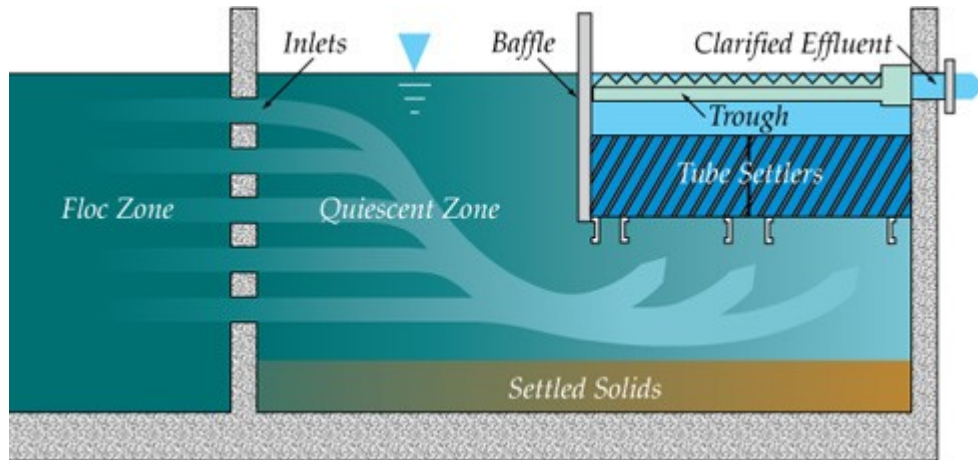
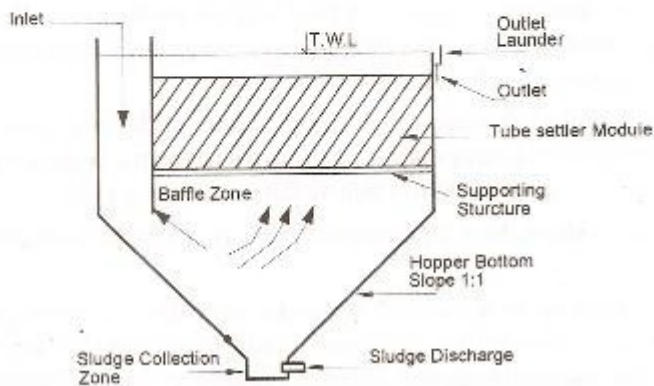




Tube Settlers



Plan view



Cross Sectional View

INFRASTRUCTURE

This unit consist three sections. 1. Flash Mixes. 2. Flocculator 3. Secondary settler (tube settler) From Raw Water UGR disinfected water needs to be lifted & it is further led to the Flash mixer, through channel. Flash mixer is a high speed mixer which mixes the coagulation chemical instantly. Coagulant chemical shall be selected according to raw water report. Then it goes into Flocculator. Flocculator is a slow speed mixer. In the flocculation chamber flocks are formed to enhance the settling process which



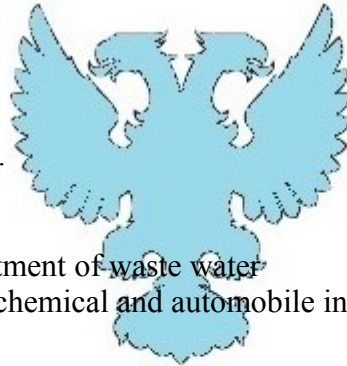
Miracle Engineering & Infrastructure

is accomplished in the next unit i.e. Secondary settler.

The tube settler has hopper bottom. The water after coagulation is fed to the settler from bottom side & travels upwards. The surface area is increased by placing specific modules at inclined angle so that the contact time & surface area with water is increased. The flocks formed after coagulation slide down the inclined modules into the hopper bottom & clear liquid overflows into the clear water sump through collection troughs. The flocks settle at the bottom & form sludge having precipitate chemical contaminant such as Mn, SiO₂ etc. which is drained out periodically & led to the common drain chamber.

APPLICATIONS

- Clarification of surface water
- Lime soda softening
- Removal of Iron, Manganese etc.
- Color removal
- White water recycling
- Primary (physico-chemical) treatment of waste water
- Removal of heavy metals in the chemical and automobile industries



MIRACLE ENGINEERING & INFRASTRUCTURE