

## PERIPHRAL DRIVE CLARIFIERS

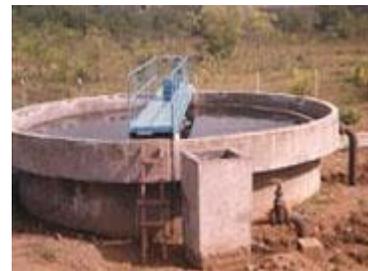
This rotating half bridge Clarifier mechanism rotates through a specially designed central pivotal heavy duty slewing ring bearing. A number of blades are arranged in a formation simulating scraping action equal in effect to continuous parabolic blade. Each blade is free to hinge and ride at right angles to the tank flow and is able to swivel at its centre to follow the contours of the tank floor at any angle.



## CENTRAL DRIVE CLARIFIERS

Fitted with a sturdy drive arrangement consisting of roller bearings. Twin (Double) Scraper arm sweeps the floor twice in one revolution and are designed to cover the entire floor area. This ensures complete and efficient sludge removal.

Additional scraper blades provided in the central sludge hopper so as to prevent any possible sludge deposition there. Inlet (FEED) well designed to efficiently disperse water without creating undue turbulence in the settling tank.



## LOW SPEED AERATOR

The aerator Device is the heart of an activated sludge process. It provides oxygen to the living organisms. In order to do this function efficiently, the aeration device must not only be capable of transferring oxygen from the atmosphere to the liquid, but must also distribute the oxygen through the bulk of the liquid to the micro-organisms. Simultaneously, it should keep the sludge in suspension, and most important, should provide complete intimate and uniform mixing of the liquid. Only by performing both the mixing and aerating functions equally well will efficient treatment be obtained.



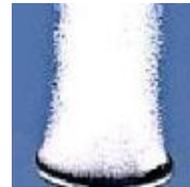
## HIGH SPEED AERATOR

Liquid is drawn through the core at high velocity with the high-speed rotation of the impeller. The liquid hits the deflector and produces an area of high intensity spray diffusion. A large and continuous air/water interface for oxygen is thus created.



## DIFFUSED AERATION :

The two basic methods of aerating wastewater are to introduce air or pure oxygen into the waste water with submerged diffusers or other aeration devices. To agitate the waste water mechanically so as to promote solution of air from the atmosphere.



A diffused air system consists of diffusers submerged in the waste water, header pipes, air mains and the blowers and apertures through which the air passes.

Three categories are defined :-

- 1) Fine Pore Diffusers
- 2) Nonporous Diffusers and
- 3) Other diffusion devices such as Jet Aerators, Aspirating Aerators and U-tube Aerators.

## PACKAGED SEWAGE / EFFLUENT TREATMENT PLANT

For treating effluent, or sewage generated by large colonies, Hotels, Hospitals and institutions / commercial buildings NOVATECH offers compact sewage treatment plants.

The treated effluent water can be further polished through Tertiary treatment with Filtration plant, Activated Carbon Filter and Softeners to produce clean, clear and hardness free water for reuse in the industries for Cooling Tower make up or gardening purpose.

NOVATECH has developed a Compact Effluent /Sewage Treatment Plant, which can treat up to 100000 Litres/day of effluent / sewage. The entire package unit is skid mounted and can be installed near to the effluent receiving underground tank. This is the only underground tank which client has to provide at site to collect the raw sewage/effluent. After treatment, the treated water can be reused for gardening or can be disposed off. The area occupied by the plant is around 10 sq.m. and the power required is 10 H.P.

The packaged Effluent / Sewage treatment plant uses all the treatments of aerobic system. It includes Aeration by air diffuser to increase the dissolved oxygen and decrease the BOD in the effluent, sedimentation of bio mass in tube settler, filtration and activated carbon filtration of sewage through Pressure Sand Filters and Activated Carbon Filters and finally chlorination of sewage for disinfection.

