Decanter Centrifuge

Description

Continuous separation:

Virtually all branches of industry need to separate solids from liquids at some point in their manufacturing processes. Sharp has more than 10 years of experience in meeting this requirement using decanter centrifuge technology. The decanter centrifuge is based on the simple idea of a clarifies or setting tank, in which particles, sediment and solids gradually fall to the bottom due to the force of gravity.

How a Decanter Centrifuge Work:

A Decanter Centrifugeseparates solids from one or two liquid phases in one single continuous process. This is done using centrifugal forces that can be well beyond 3000 times greater than gravity. When subject to such forces, the denser solid particles are processed outwards against the rotating bowl wall, while the less dense liquid phase forms a concentric inner layer. Different dam plates are used to vary the depth of the liquid - as required. The sediment formed by the solid particles is continuously removed by the screw conveyor, which rotates at a different speed than the bowl. As a result the solids are gradually ploughed out of the pond and up the conical beach.

The centrifugal force compacts the solids and expels the surplus liquid. The dried solids then discharge from the bowl. The clarified liquid phase overflow the dam plates situated at the opposite end of the bow.

Material technology:

Sharp uses high grade stainless steel for all parts the come into contact with the process, in order to avoid any risk of the corrosion associated with the uses of carbon steel.

Features & Application

- All Chemical & Food Processing Industries
- Minimum maintenance
- Dimensionally accurate
- Longer working life
- Robust construction
- Durable
- Excellent performance