

SLUDGE THICKENERS



Process application:

Thickening is the process used to increase the solids content of sludge by the separation and removal of a portion of the liquid phase. Gravity thickening makes use of the force of gravity as the main agent in the settling and thickening process.

The thickening of sludge plays an important role in reducing device relating to the provision of sludge handling equipment and the operational costs of the handling and treatment of the sludge.

Sludge Thickeners are used in a variety of applications to increase the solid concentration in industrial or biological sludge prior to advanced dewatering processes. In the municipal sector, typical applications of sludge thickening include thickening of DAF or filtration backwash water from water treatment plants or sludge thickening of activated sludge from biological treatment plants. In order to dewater sludge and thicken to a transferable cake the dry solids concentration in the feed slurry should be in order of several percent to make operation of such sludge thickening equipment effective. Sludge thickeners are installed as a primary processing stage after "wet" sludge storage.

Construction:

Sludge thickeners are designed to achieve maximum solids concentration in the thickened sludge. The sludge thickener tanks are generally constructed from either concrete or epoxy coated mild steel. These are rectangular or circular in shape.

