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PREP-TEC COMPACTA-FILTA.

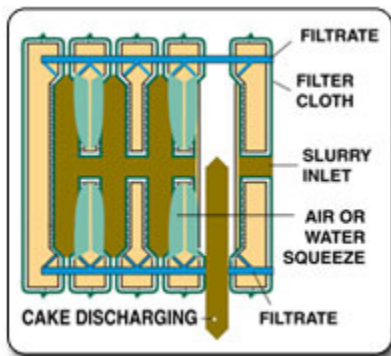


Typical Compacta-Filta Dewatering Operation

So What Is A Compacta-Filta, How Does It Work, & What Is Dewatering?

A Compacta-Filta is a liquid-solid separation device used to reduce the volume and weight of a slurry waste or process stream by separating liquid **filtrate** and solid **filter cake**. This process is often referred to as **dewatering**.

The operation of a Compacta-Filta is therefore a batch process. Depending on the particular application, the Compacta-Filta may be used to recover the solid particulate, the liquid stream, or both.



The Compacta-Filta accomplishes **dewatering** within a series of chambers into which process slurry is pumped.

Filtered liquid (**filtrate**) passes through filter cloths and exits the press leaving behind filtered solids (**filter cake**).

The Compacta-Filta is then opened and the filter cake is discharged by gravity effortlessly into a collection skip.

Compacta-Filta

Many processes in the food, chemical or pharmaceutical industries make products that are liquid-solid suspensions or slurries. These mixtures are a little like a runny mud or milk-shake. The solids in them do not dissolve in the liquid but are carried along in it. Compacta-Filtas separate the solids from the liquids so that the useful part can be processed or packaged.

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PREP-TEC Compacta-Filtas

Compacta-Filtas work in a "batch" manner. They are loaded with slurry using a double diaphragm air pump. The slurry is pre treated in a mixing tank with a flocculent to aid the solid / liquid separation & break the emulsion.

Compacta-Filta operation

A Compacta-Filta consists of a series of chambers containing square or rectangular filter plates supported in a frame. Before the filter chambers are loaded with slurry, the plates are forced together with a hydraulic ram that generates pressures typically in the region of 100 pounds per square inch (70,000kg per m²). For comparison, a car tyre would be inflated to around 30 pounds per square inch. Each plate is covered by a material or membrane that acts as the initial filter when the press is in operation. As the solid filter cake builds up, the cake adds to the removal of fine particles. The solution coming through the filter, called the filtrate, will be very pure. If it is not wanted the filtrate can be drained away for safe disposal. At the end of the compression, the solid filter cake is effortlessly removed. The whole process can be computer controlled to make it automatic or semi-automatic.

Applications:

Foods industry: Vinegar, Honey, Water, Fruit juice, Soft drinks, Edible oil

Chemicals: Paints, Varnish, Polishes, Pigments, Lubrication oils, Ink

Pharmaceuticals and Cosmetics: Syrups, Hand lotion, Shampoo, Soap, Proteins, Perfume

Benefits:

Compacta-Filtas can usually pay for themselves within 1 -2 years of operation by reducing the cost of Liquid waste disposal. The filter cake can be disposed of into a normal skip that you would normally have on site, filling the voids created by larger items being disposed. The cake once flocculated and compressed will not go back into emulsion when added to water so can go safely to land fill without any fear of leaching.