



# CHAMBER FILTER PRESS, NCFP

Dewater sludge with high pressure



## Chamber filter press

Nijhuis Water Technology has designed a chamber filter press for solid-liquid separation for industrial and municipal sludges.

### Applications

- Flotation sludges
- Chemical sludges
- Biological sludges

The Nijhuis Chamber Filter press can either be integrated in a total solution or offered as a single product for your wastewater or excess sludge.

## ADVANTAGES & CHARACTERISTICS

- Manual, semi-automatic or automatic handling.
- High dry solids concentrations, typical between 20 and 40%.
- Completely pre-assembled unit.
- Robust steel construction.
- Filter press sizes between 250mm to 2000mm.
- Applicable for various types of sludges.
- Standard and customized filter presses.
- Extendable and modular design.
- Reducing sludge disposal cost.



## TECHNICAL DESCRIPTION

The sludge is collected in a sludge storage tank with mixer, from where its fed into chamber filter press (carried out with positive displacement pump(s)). The basic construction of a filter press consists of two frames that hold the filter plate pack suspended by means of carrying beams.

In order to hold the filter plate pack closed during filling and filtration at a constant pressure a hydraulic unit in combination with a hydraulic cylinder is installed. The chambers formed between plates when the filter remains in a closed position, retain the solids to be hold between the filter cloths which cover the total plate area. The filtrate outlet is continuous either via an open or a closed central discharge.

During the filling cycle the sludge is fed and pressed into the chambers. Feeding takes place until a certain pressure is detected and reached. At the end of the press cycle the chambers should be opened manually. The cake falls down into a container which placed under the filter press.

Nijhuis Water Technology offers a full range of filter presses from sizes 250mm to 2000mm incorporating the latest technology.

