Requirements for Belt Filter Presses

The decisive factors for the users of Belt Filter Presses are a high capacity and the highest reliability of the dewatered sludge, as well as a continuous, stable dewatering process and a maximum reliability are required. The PETKUS Belt Filter Presses meet these requirements by:

1. The dewatering process is arranged from "bottom" to "top". The dewatering process begins with an initial, low pressure, low energy consumption. The sludge is at least 50% dewatered and properly spread out on the belts. After this pre-dewatering stage the remaining water is removed from the cake most of the filterable water is removed.

2. By the tension of the belts, the sludge is transported or subject to strain. By the pressure of the belts, the cake is pressed out and dried. The belts are continuously cleaned by a combination of hydraulic and mechanical cleaning. The belts are continuously cleaned by a system of specially designed guide plates, baffles and dewatering supports assisting the dewatering process and guarantee a uniform distribution of the sludge over the entire belt width. After this pre-dewatering stage the dewatering is up to 3% DS distributed to both sides of the roller. The remaining water is removed from the cake. The free water flows through the belt to the gravity dewatering zone and distributed through both belts, to outside as well as to the rear part of the press by further increasing the pressure along the press section. Between rough several pairs of pressing rollers where most of the remaining water is removed.

3. The pre-dewatering section is specially designed and arranged so as to suit the sludge needs for spreading to induce by the distribution separation devices to drain off the free water through the empty spaces of the belt.
The close coordinated cooperation of regionally responsible sales engineers, technology- and machine specialists as well as engineering- and turn key project experts assures the most excellent result for the customers. A global network of PETKUS offices and representations as well as associated partners guarantees a confident and successful cooperation in partnership with convincing performances when consulting technologically and practising the transfer of know how as well as the after sales service locally and world wide.

PETKUS Technologie GmbH, founded in 1852, was the world’s first manufacturer of mechanical seed sorting. PETKUS today has grown to be one of the market leading suppliers of a comprehensive range of seed and grain handling and processing technologies, feed plants as well as filtration and water technology.

The business area water is engaged in systems and technologies for processing of municipal, industrial, organic and mineral sludge. PETKUS is developing and producing a considerable range of filter presses and thickening systems as well as systems for filtration and sludge dewatering. The performance of PETKUS covers

- consulting
- service
- machines and plants
- engineering

Benefit through technology