JZ Engineering

Chamber Filter Press with Carbon Filter Elements

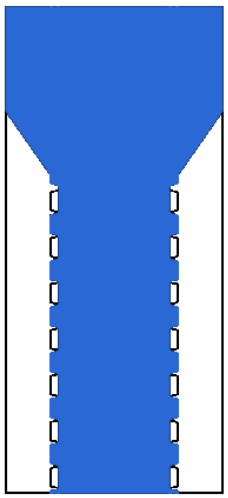
JZ Engineering opens up new ways in solid – liquid separation

Carbon:

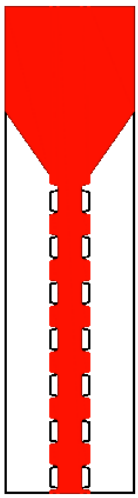
Mechanical values similar to steel with the characteristics of plastic

- **higher temperatures**
- **higher pressures**
- **thinner filter plates**
  = more volume and more filter area in the filterpress
- **chemically resistant**
- **ATEX - equipment**

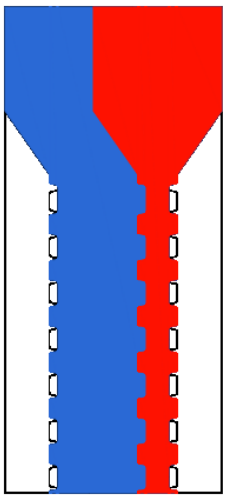
State of the Art: (PP)



Carbon Plate:



Comparison:



Filter plates experience a new generation:

Originally, filter plates were made out of wood in a **plate and frame system**.
The next development stage were **chamber filter plates** made of steel, cast iron and finally most of them in polypropylene.
After development of the **membrane plates**, the invention of the so-called "**hot filter press**" is the newest development so far.
Here the process parameters find their limits with the materials used, the temperatures rise up to 120 °C.

The new **"Engineering Material Carbon"** provides the solution for previous gaps in available materials on the market.

Thermal limitations of use:

From -20 °C to 120 °C without significant mechanical limitations.

- Filtration temperature or temperature during further process steps such as cake washing or drying the cake up to 120 °C
- Cleaning (disinfection) or for steaming the plates is possible
- For special applications a material for up to 180 ° C is available

High elasticity modulus and high tensile strength:

As a result, the inner thickness / plate web, can be reduced compared to most materials.

- Reduction of the plate weight
- More chamber volume in the filter press
- More filter area in the filter press

Linear extension:

The linear thermal expansion is close to steel. As a result, no precautions are necessary to compensate changes in length should in temperature changes occur.

Chemical resistance:

Similar to PP, even suitable for the petrochemical industry.

ATEX-zones:

Due to the antistatic effect of the carbon, the plates are well suited for plants that require Atex-zones.

The carbon filter plate is also available in a so-called sandwich design.

JZ Engineering GmbH
Managing Director: J. Zeller
Kirchberg 3a
D-87647 Oberthingau
Tel.: +49 (0) 8377 / 9749-115
Mobil: +49 (0) 171 2068 441
www.filterpressen.engineering
info@filterpressen.engineering