

# JVK Filtration Systems

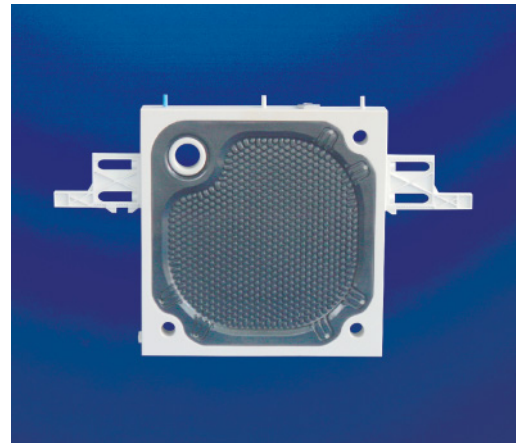
## SPECIAL DESIGN

### CAKE DRYING WITH MEMBRANE CHAMBER PLATES

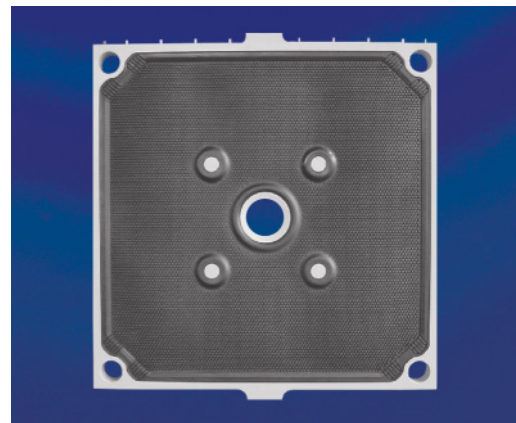
PATENT No. DE 3713419

#### APPLICATION

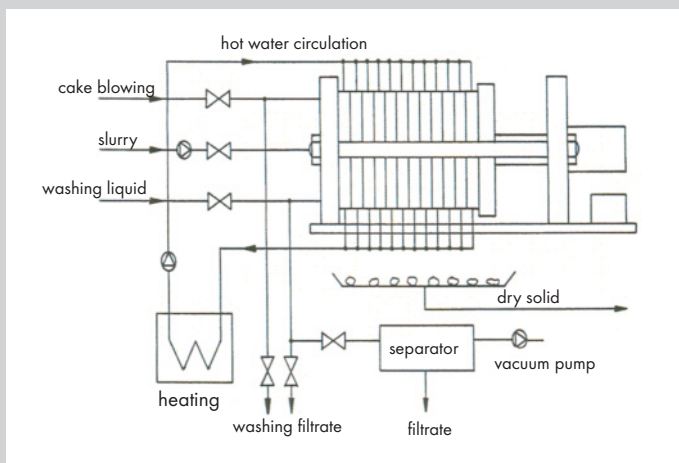
- Cake drying with JVK membrane chamber plates combines dewatering and drying in one filter press only
- the cake drying with heated membranes is patented
- after filtration the cavity between membrane and core plate is filled with hot water or steam to heat the membrane
- the generated water vapor from the filter cake is removed by vacuum or by pressure shocks with hot dry air
- the permanent cake shrinkage is compensated by the expanding membrane keeping the heat contact to the cake
- washing, sterilizing and cake blowing before drying process is possible with this new JVK System
- special membranes with high thermal conductivity and fast heat transfer have been developed



membrane chamber plate 500 x 500 mm



membrane chamber plate 1500 x 1500 mm



#### ADVANTAGES

- for the process steps of filtration and drying no additional drier is necessary
- easy conversion of existing filter presses to cake drying system
- this new development allows to use also a mixed package
- possibility to work with normal membrane chamber plates instead of special filter plates
- the cake volume is not reduced by separate heating plates
- treatment of different batch sizes by constant product quality
- minimum thermal losses
- due to the drying in the filter press there is no risk of explosion or dust combustion
- no protection against abrasion and corrosion needed
- low disposal costs by maximum weight and volume reduction of the cake



filter press for cake drying with membrane chamber plates  
1200 x 1200 mm