

BHS-Sonthofen GmbH

*Thin-Cake Solid-Liquid Separation,
Cake Washing & Drying Technologies*

**LIQUID CLARIFICATION SYSTEMS
&
COMBINATION FILTRATION**

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BHS-Sonthofen GmbH

Seminar Outline

- **BHS Introduction**
- **Clarification-Combination Filtration**
 - **Testing & Applications**
- **Candle Filter Technology**
- **Pressure Plate Filter Technology**
- **Summary**

BHS-Sonthofen Location



BHS-Sonthofen GmbH

Divisions

**Mixing
Technology**



**Recycling
Technology**



**Crushing
Technology**



**Filtration
Technology**

BHS-Filtration New Location



- **BHS-Filtration Inc.
New Location**
- **14,000 ft² Facility of
Office & Warehouse**
- **\$1.3 million
Investment**

BHS Technology Portfolio

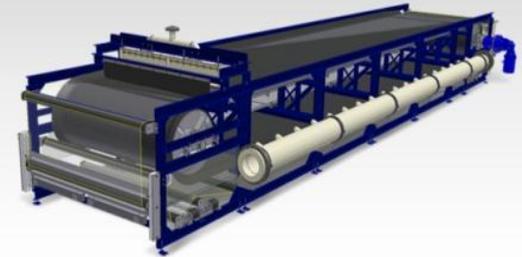
Rotary Pressure Filter



Indexing Belt Filter



Rubber Belt Filter



Candle Filter



Pressure Plate Filter



Autopress



BHS Batch/Continuous Filtration and Clarification for Low Solids Concentrations

**Clarification and Recovery Applications
with the BHS
Candle and Pressure Plate Filters**

BHS Batch/Continuous Filtration and Clarification for Low Solids Concentrations

- **Applications include water & amine scrubbers, chlor-alkali, chemical, biodiesel, gasification / grey water, activated carbon, catalysts, heavy metals, PTA fines and pharmaceutical**
- **Replaces filter presses, manual plate filters, bag, cartridge, metal filters and centrifuges**
- **Filtration to 0.5 um, cake washing and drying**
- **Precoat of the filter media is possible, if required**
- **Complete containment and Automatic discharge**

BHS Batch/Continuous Filtration and Clarification for Low Solids Concentrations

Candle Filter: Vertical Cake Structure

Cake discharge by gas expansion of the filter media

Pressure Plate Filter: Horizontal Cake Structure

Cake discharge by plate vibration & gas-assist

No spinning plates-eliminates solids sticking

No rotating or mechanical seals-eliminates leakage

BHS Lab Testing for Combination Filtration

BHS-Pocket Filter

20 cm² filter area

400 ml content



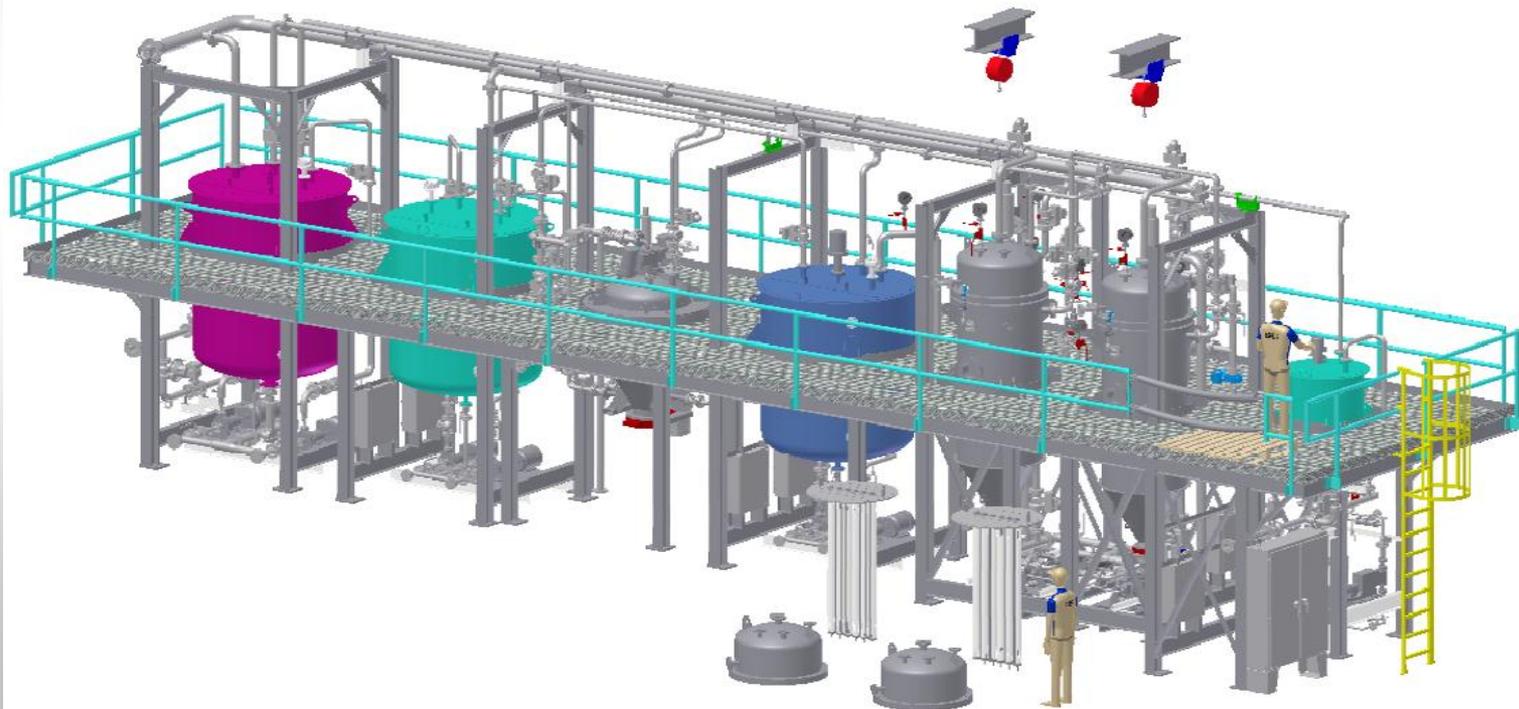
BHS Lab Testing for Combination Filtration



BHS Concentrating Candle Filters & Pressure Plate Filter

- **Feed Rate:**
260 gpm at 600 ppm solids
- **Result:**
2 x 20 m² Concentrating Candle Filters
1 x Pressure Plate Filter (4 m²)
For Filtration, Cake Washing & Drying

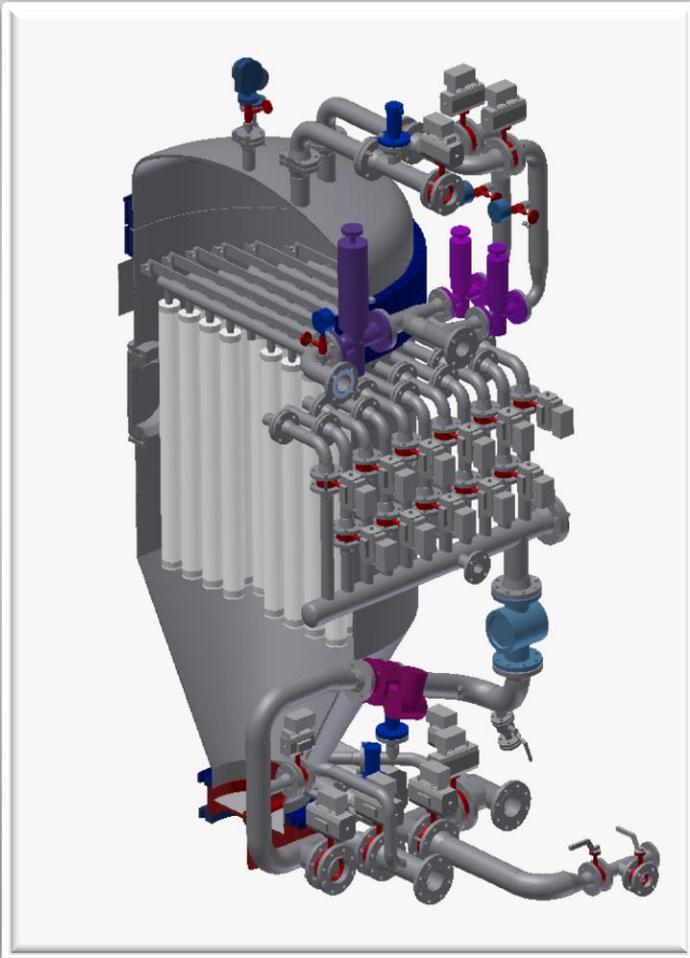
BHS Concentrating Candle Filters & Pressure Plate Filter



BHS Concentrating Candle Filters & Pressure Plate Filter



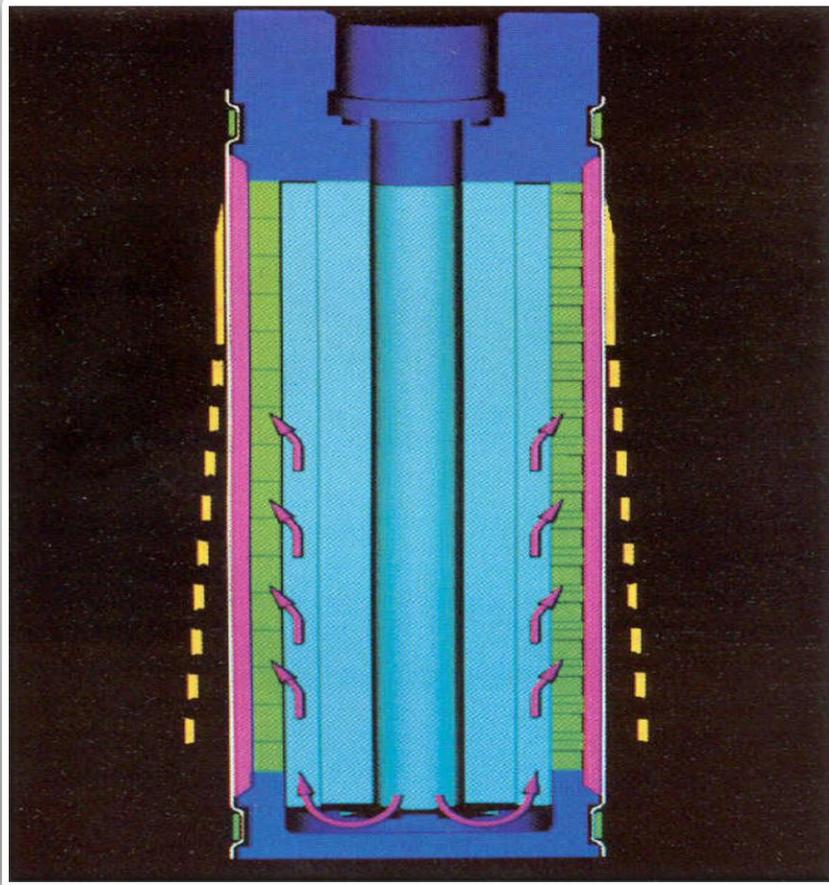
BHS Candle Filter Technology



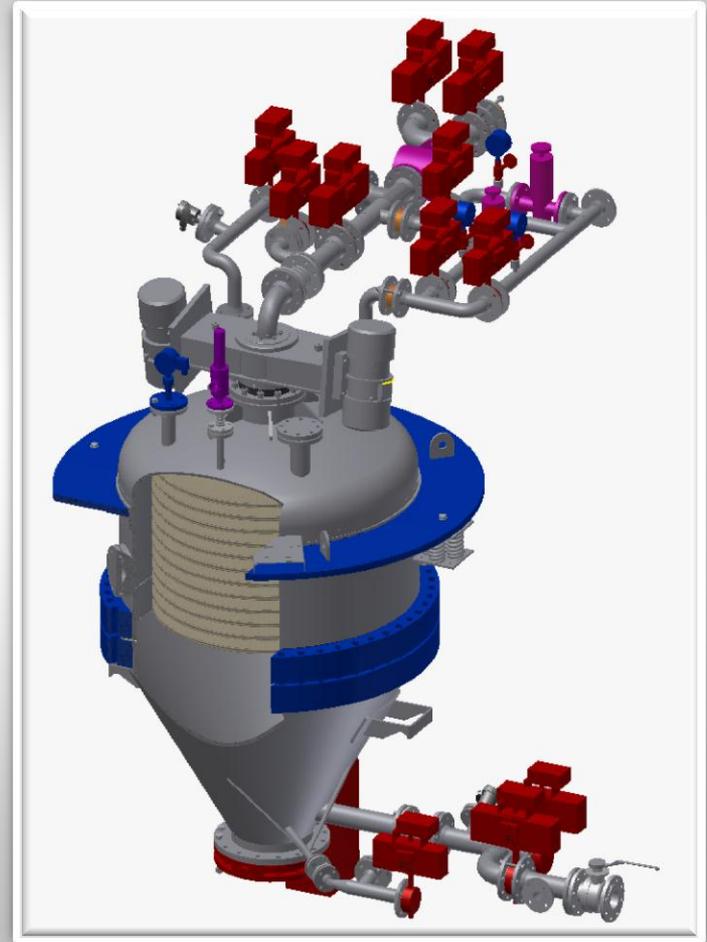
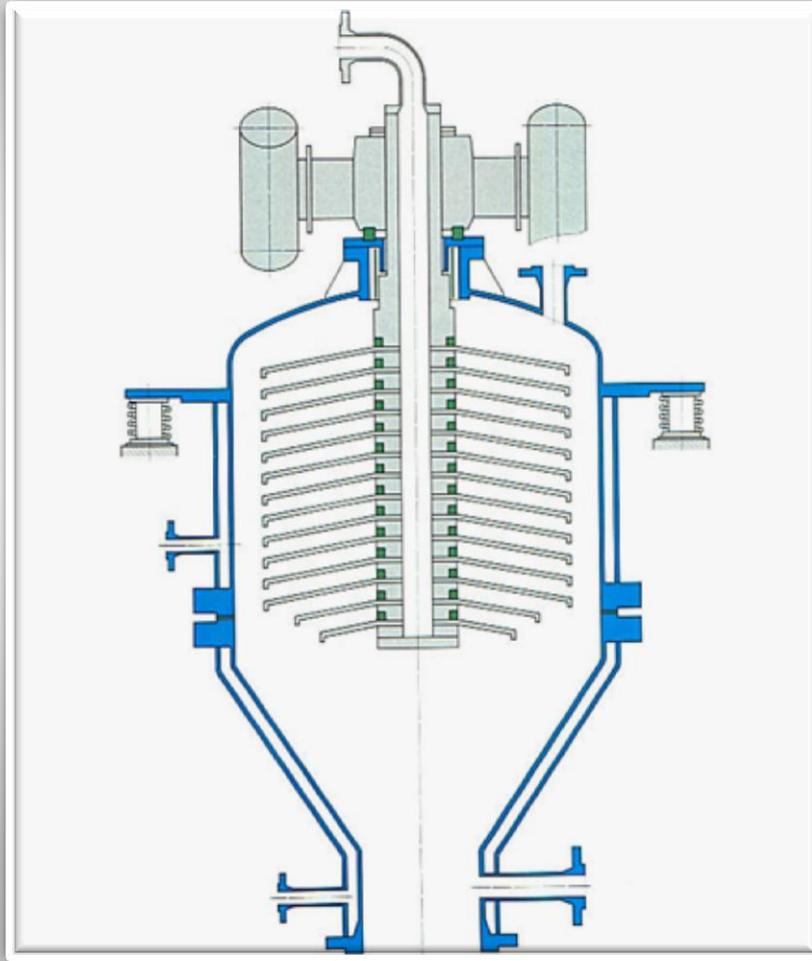
BHS Candle Filter Technology



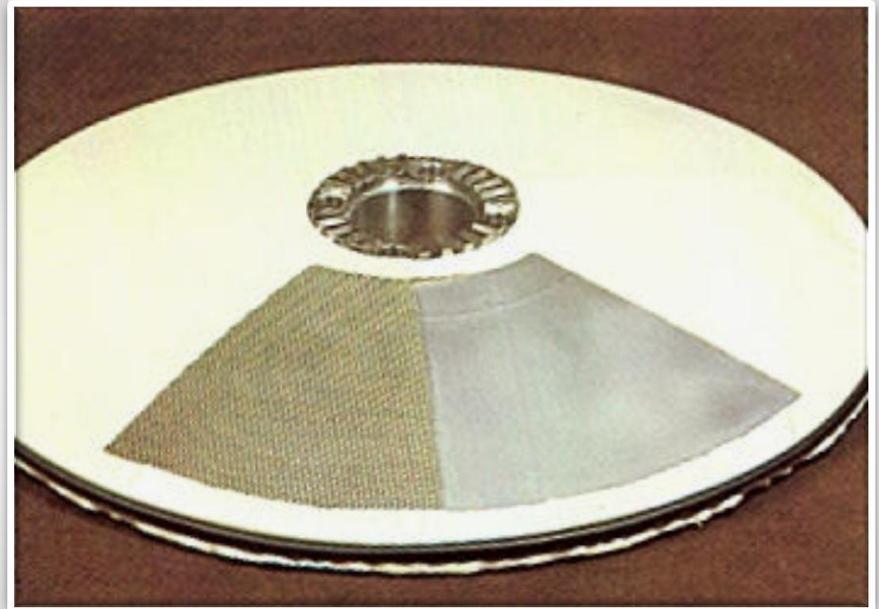
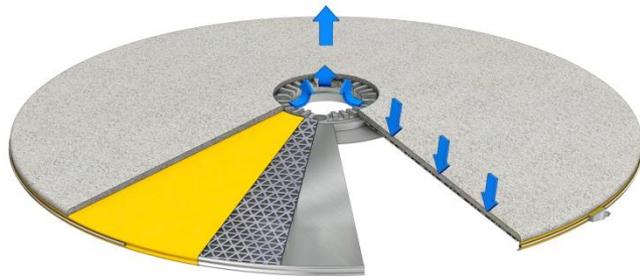
BHS Candle Filter Technology



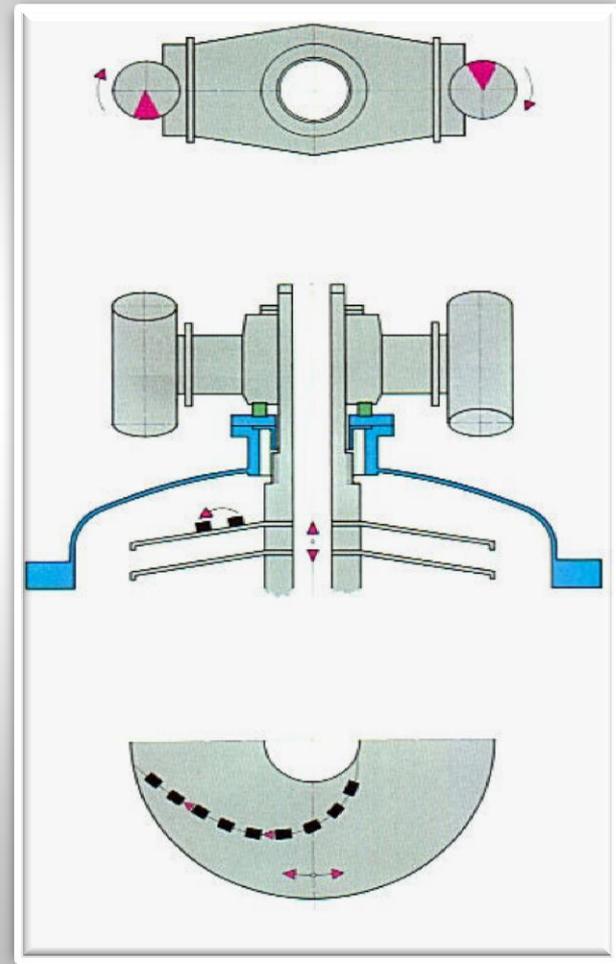
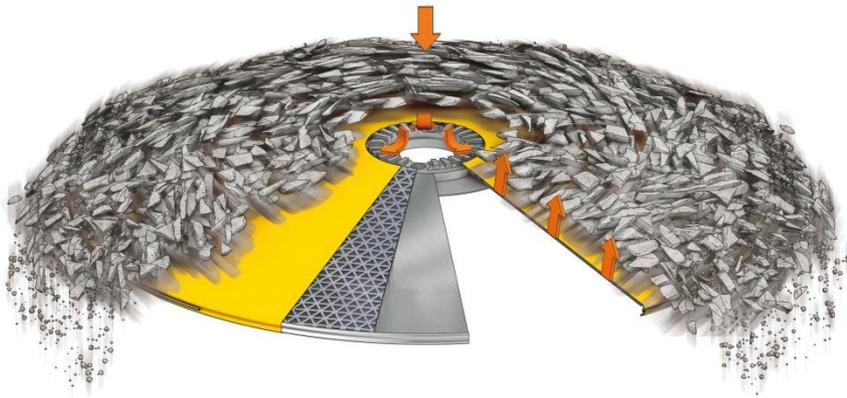
BHS Pressure Plate Filter



BHS Pressure Plate Filter



BHS Pressure Plate Filter



Summary of BHS Turnkey Projects

- **Description of Installation**
- **Scope Engineering**
- **Process Design**
- **BHS Technologies**
- **PLC Controls**
- **Tanks, Pumps, Instrumentation**
- **Full skid packages**
- **Commissioning**
- **Performance Guarantee & Testing**

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THANK YOU!

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