

# PILOT PLANTS THIN FILM EVAPORATOR

Pilot plants close the gap between laboratory and production facilities.

The Thin-Film-Multipurpose-Pilot-Plant can be used universally. Be it for evaporating, concentrating or for the recovery of recyclables.

This system is perfectly designed especially for high-boiling, higher-viscosity and high-melting products.

Small volume production and test runs for new challenges are possible.

The modular design allows a variety of different applications. With application-specific wiper types the system dominates a wide range of products.

## TYPICAL PRODUCTS:

- Tall Oil
- Oil Additives
- Waste Oil
- Polymers
- Syrup

## CONDITIONING EQUIPMENT:

- Material: Stainless steel 1.4571 or equivalent
- Agitator vessel with jacket: 50 l volume
- Thin Film Evaporator: 0,25 m<sup>2</sup> heating area, Rotor with FU with double-acting mechanical seals and thermosiphon vessel
- Condenser: 1 m<sup>2</sup> condensation area
- Cold Trap: 20 l volume
- 3 Gear pumps: 10 - 50 l/h each, Motor with FU
- Product preheating with plate heat exchanger
- 1 Rotary vane pump
- 2 Heating circulators, 2 Refrigerated circulators
- Evaporator, product pumps and vacuum pump ATEX category II 2G
- Heating and cooling units and control cabinet in Ex-free zone

## SPECIALITIES:

- Robust design, suitable for continuous operation and small-quantity production
- Product lines in jacketed design
- Evaporator, product pumps and vacuum pump incl. drives suitable for Ex-Zone 1
- PLC control and visualization
- Extensive measuring technology, for maximum process data gain for scale-up incl. energy consumption
- CE MRL 2006/42 / EC and ATEX 2014/34 / EU conformity rated
- Technical documentation according to MD

# PILOT PLANTS THIN FILM EVAPORATOR

Preheating  
20...200 °C



from/to PHE  
and feed vessel  
and trace heating

Heating TFE  
20...350 °C



from/to TFE

Cooling TFE  
-20...80°C



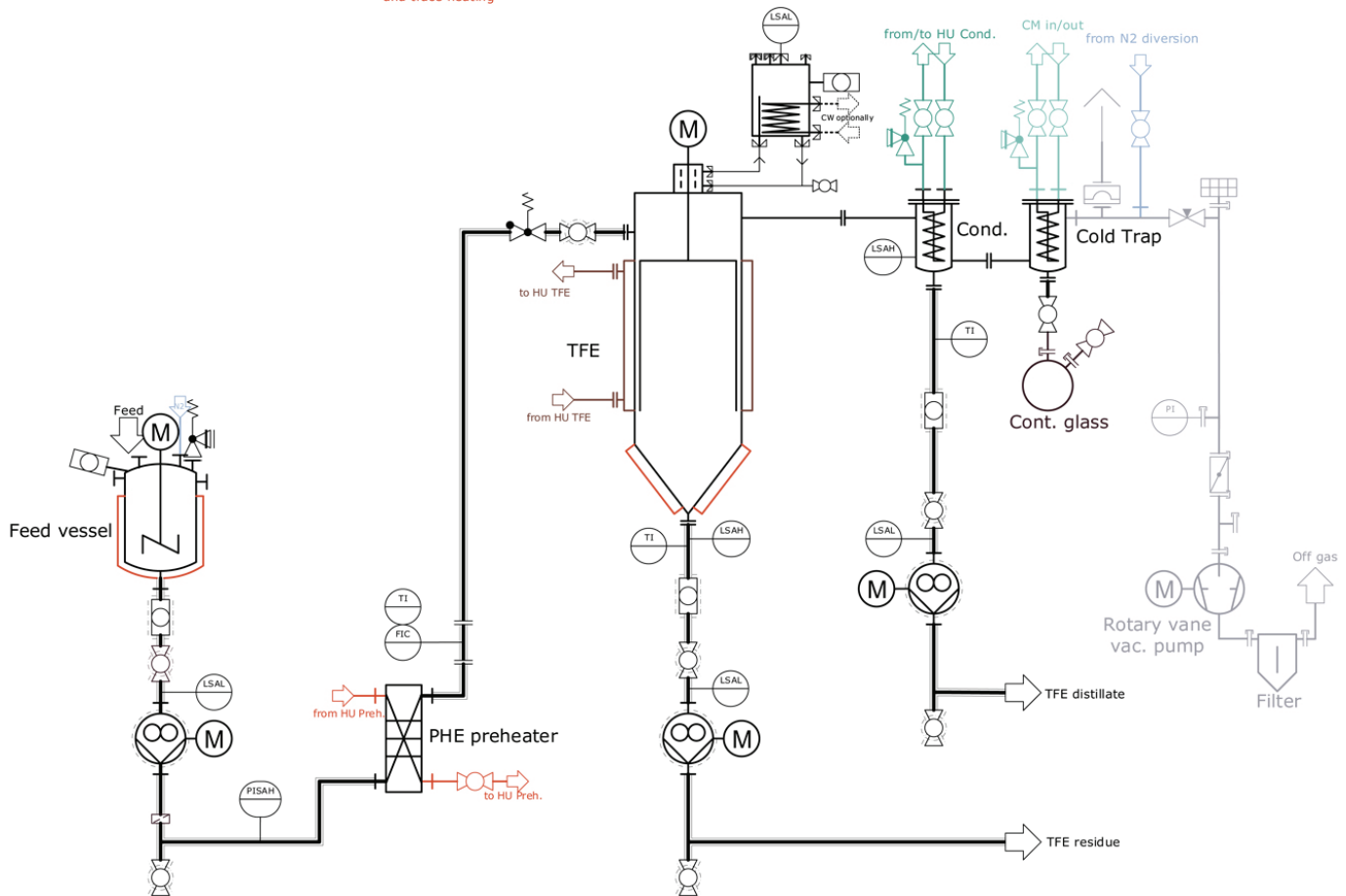
from/to TFE Cond.

Refrigerating  
Cold Trap  
-40...40°C



from/to CT

EX free zone for Heating and Refrigerated Circulators



## PROCESS DATA:

- Feed Rate: 10 - 50 kg/h
- Max. heating temperature: 350 °C
- Process Pressure (Vacuum): 0,1 - 1013 mbara
- High suction rate: 170 m<sup>3</sup>/h
- For products with viscosity until 120 Pas and melting point until 200 °C

For more information or an individual offer please contact:

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