



**SONDEX®**

## ► SEC174 Rising Film Evaporator

### Recommended Applications:

The SEC174 Sondex plate evaporator is a specially developed heat exchanger for evaporation duties.

### Design Principle:

The plate is designed as a semi-welded cassette, with a welded channel for the medium side, and on the evaporation side there is a traditional plate heat exchanger gasket.

The unique plate design ensures an even distribution of the product over the whole plate making optimal rising film evaporation. The special designed plate pattern ensures a high turbulence of the fluids on both sides, resulting in a high heat transmission co-efficient. This results in a very compact heat exchanger with a small hold-up volume.

### Installation:

The large DN600/24" connection on the evaporator makes it possible to cover many duties in a single connection solution. This means that the connections will be on the head of the heat exchanger, which is of big advantage during service work and if the capacity is to be increased.

The plate pattern and inlet area are also designed for CIP cleaning, which makes the service of the plate heat exchanger easy.

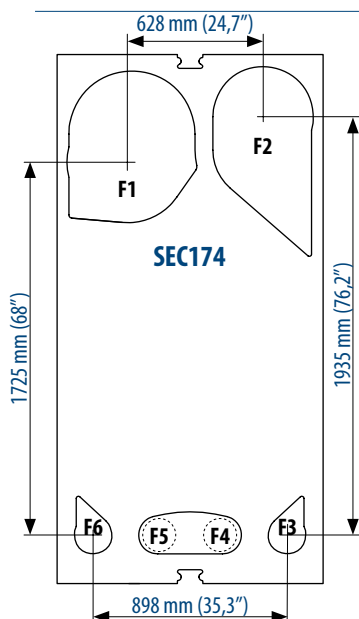
### Data Required for Correct Quotation:

- Duty
- Temperature
- Working pressure
- Pressure loss
- Thermodynamic properties
- Product concentration by inlet and outlet
- Flow rate
- Type of media
- Working Temperature
- Boiling point
- Preferred number of effects

Above data determines the choice of heat exchanger.



SEC174



### Technical Information

#### Frame:

- Painted frame, colour RAL 5010 (available in other colours)
- The frame comes with clamping bolts placed around the frame edge.

#### Design Pressure:

- Painted frames: 0.6/1.0 MPa. (87/145 PSI)

#### Construction Standard:

- EN13445 (PED 2014/68/EU)
- ASME sec VIII, Div. 1

#### Connections:

- Inlet product side (F4 & F5): DN150/6" flange.
  - Outlet (F1): DN600/28" flange.
  - Inlet medium side (F2): DN450/18" flange.
  - Outlet (F3 & F6): DN150/6" flange.
- Flanges in carbon steel, rubberlined or stainless steel.  
According to all known standards.

#### Plate Material:

- AISI 304 and AISI 316
- Other materials available on request.

#### Gaskets:

The gasket is placed in the closed gasket groove, that is formed by the plates. This design makes the plate suitable for high working pressures. The plates are strongly guided by the gasket during the assembly of the plate heat exchanger.  
Materials: NBR and EPDM.  
Other materials available on request.

#### Extra Equipment:

- Safety cover in stainless steel
- Insulating jacket
- Assembling spanner
- Foundation feet
- Instrument flange
- Thermometer and manometer

For exact dimensions of the PHE please refer to the dimension drawing