

# Short Path Evaporator

## Ideal system for fine chemical separation

Global Short Path Evaporator is perfect for separating volatile components from chemical mixtures with properties that are hard to separate, heat-sensitive and high-boiling. The combination of very low pressure (up to 0.001 mbar, abs.), thin film formation and short residence time on the heated surface makes our Short Path Evaporator ideal for the gentle separation of high-boiling heat sensitive chemical mixtures.

The all-glass design allows for continuous visual monitoring and the adjustable feed rate provides control over film formation.

## General specifications

Evaporation surface area	:	0.05 m <sup>2</sup> (DN 60), 0.1 m <sup>2</sup> (DN 100)
Maximum temperature	:	+200 °C in jacket with PTFE wiper
OPTION	:	+300 °C in jacket with PBI* wiper
Operating pressure	:	0.1 mbar (abs.) to atm
Operating jacket pressure	:	Up to +0.5 barG (+0.05 MPa)
Feed rate	:	0.1 to 1.5 kg/h (DN 60) 0.3 to 3.0 kg/h (DN 100)
Maximum viscosity	:	Up to 1,000 mPa.s
Maximum wiper rotation speed	:	DN60 300rpm DN100 200 rpm
Stirrer seal	:	Magnetic



Short Path Evaporator can be customized and we are happy to discuss the design of custom features with you in order to meet your specific process need. Many applications benefit from adjusting the material properties and/or physical size of the evaporator.

- Fully corrosion resistance models for aggressive chemical mixture separations
- Modifications to evaporation surface area e.g., 0.012 m<sup>2</sup> (DN 45) or 1.5 m<sup>2</sup> (DN 450)
- Addition of thermal jacket to feed and receiving vessels
- Continuous feeding design
- Dual condensers

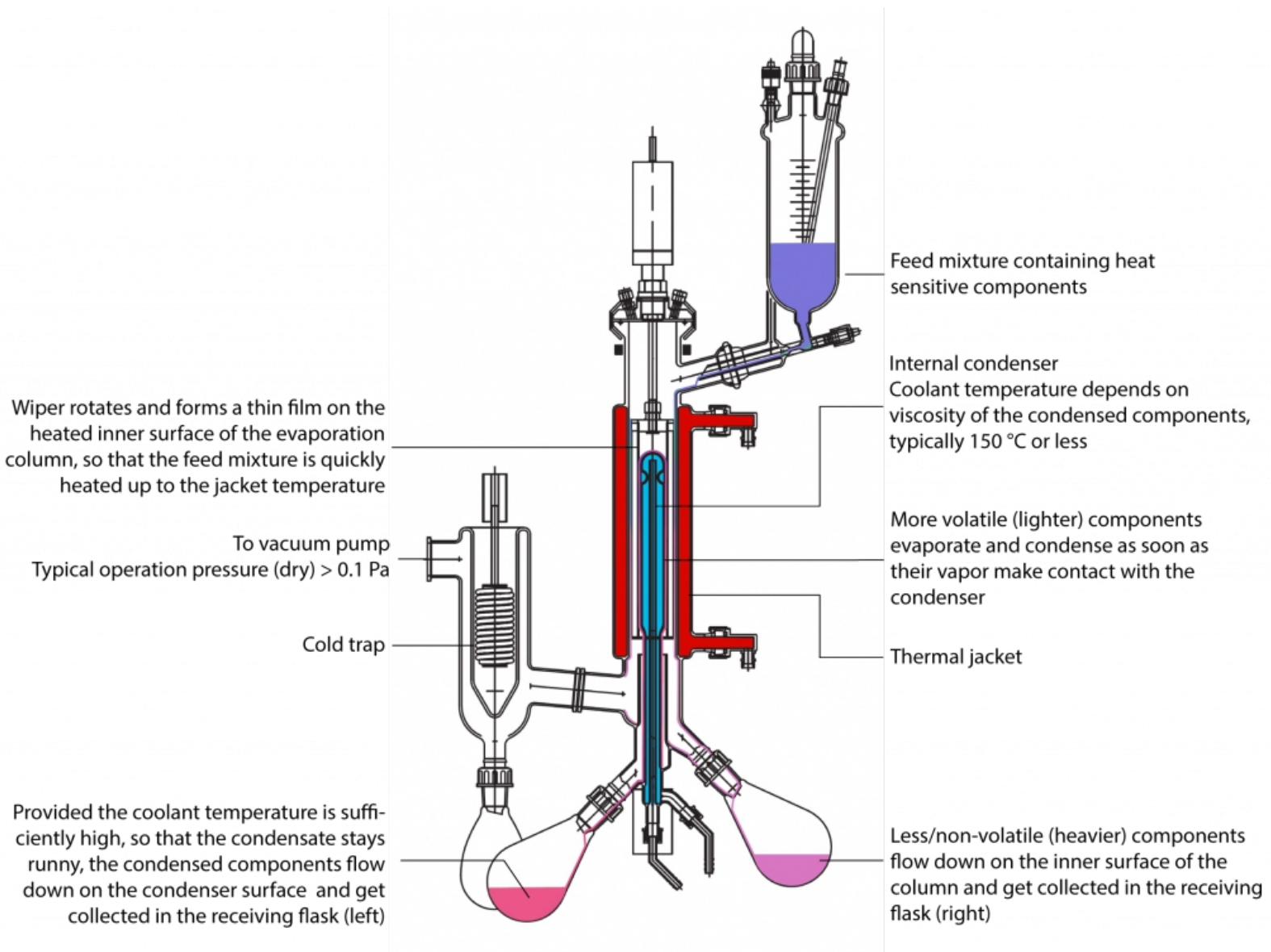
## Short Path Evaporator features

- Removal of trace volatiles from heat sensitive mixtures
- Suitable for heat sensitive mixtures with high boiling point
- Minimal pressure drop due to internal condenser
- Uniform thin film formation by PTFE wipers
- Shorter residence time compared to other evaporation systems
- Process visibility due to all glass design
- Operating range up to 200 °C
- Stand with castors for mobility

# Short Path Evaporator

Why should you choose a glass Short Path evaporator?

Global Short Path Evaporator offers excellent performance at lab scale. A variety of volatile mixtures with high boiling points can be separated gently and efficiently with minimal thermal degradation. Our Short Path Evaporator is highly suitable for small-scale production, process development, pilot, and troubleshooting studies.



Working Principle of Short Path Evaporator