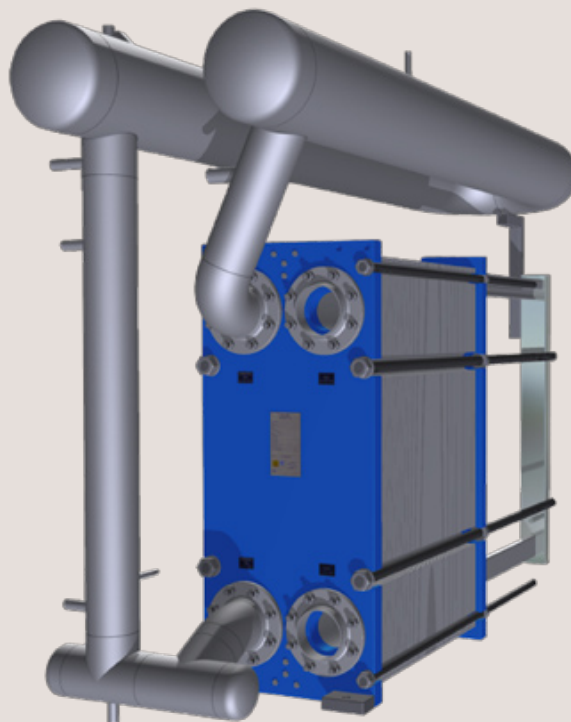




U-Turn

A new concept in flooded evaporator module design.



A New Concept In Separator Design

The Alfa Laval Plate Heat Exchanger technology enables efficient evaporation with small temperature approaches. Alfa Laval designed the U-Turn separator to ensure efficiency and to achieve smaller overall dimensions for easier and more compact installations.

The new concept in flooded evaporator module design offers

- Enhanced separation efficiency via gravity and centrifugal effects
- Insignificant internal pressure losses
- Compact design, low ammonia charge and reduced hold-up
- Short vertical ammonia driving columns to allow for small temperature approaches and high system efficiency
- Reduced height and compact profile allow for this packaged evaporator system to be installed in one piece in narrow spaces.

Liquid control The U-Turn is designed for use with most common level control device types. The vertical liquid drop leg acts as the liquid-volume and level-indicating column.

Easy connection access The front plate is designed for convenient access to both primary and secondary connections

Oil drain Integrated oil drain assembly

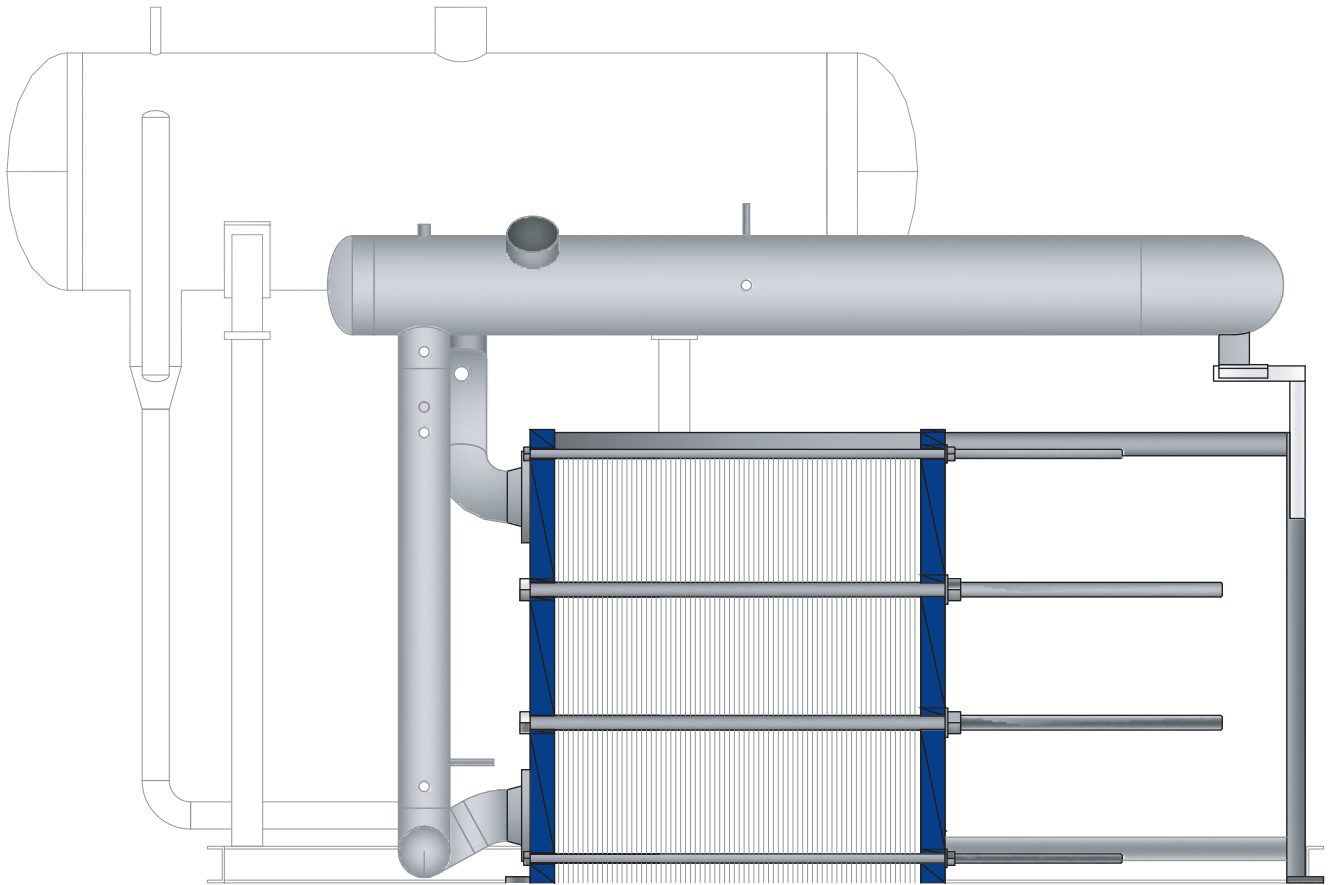
Sliding support The U-Turn design allows for thermal expansion, ensuring no buildup of thermal tensions.

Maintenance No additional steel supports are needed – both sides of the PHE are accessible for maintenance.

Three-point support The separator is supported entirely by the PHE. No further supports are required:

- One lift
- Easy setup and levelling
- Easy access for cleaning

Left or right Available in both configurations



The U-Turn evaporator module design versus traditional separator design.

The U-Turn flooded evaporator module design vs. traditional separator designs:

- Shorter height and length allow for packages to be installed on site in one piece without dismantling
- All ammonia connections access the same side
- Light-weight and easily installed
- Low refrigerant charge and reduced internal volume
- Shorter width without any external steel supports
- Integrated oil drain
- Stainless steel – no surface treatment, no corrosion.

Capacities

2 models with adopted U-Turn lengths cover ammonia capacities from 200 to 1400 kW at 0°C evaporation and from 50 to 500 kWE at -40°C evaporation.

Overall Dimensions

2 models	DN100	DN150
Height m	1.4	2.3
Width m	0.7	1.0
Length m	1.4-2.1	2.3-3.5

Material

Entirely Stainless Steel 304.

Options

Right and left configuration.

Extended oil separator pot volume.

Factory fitted nozzles for most valves and instrumentations.

Drip tray with insulation and brackets.

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.