



Gasketed plate heat exchanger Condenser - for Condensing applications

HEXNOVAS Cond GPHE is a plate surface condenser designed for condensation under vacuum. Baode Condenser GPHE is based on semi-welded technology. Vapour condenses in the welded channel while the cooling medium passes through the gasketed channel. In addition to stainless steel, the plates are also available in titanium, which makes it possible to use seawater as a cooling medium.

Applications

- Biotech and Pharmaceutical
- Chemicals
- Energy and Utilities
- Food and Beverages
- Marine and Transportation
- Mining, Minerals and Pigments
- Pulp and Paper
- Water and Waste treatment

Benefits

- Optional sub-cooling of condensate and non-condensable gases
- Flexible configuration – heat transfer area can be modified
- Easy to install – compact design
- High serviceability – easy to open for inspection and cleaning

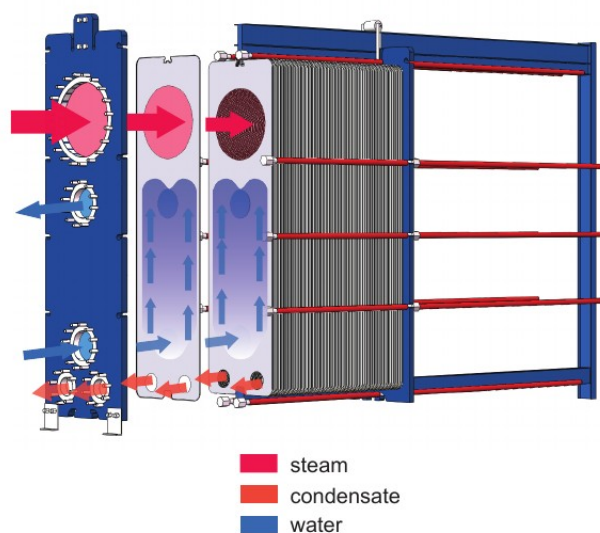
Features

Every detail is carefully designed to ensure optimal performance, maximum uptime and easy maintenance.

Selection of available features, depending on configuration some features may not be applicable:

- Reinforced hanger
- Glued gasket
- Fixed bolt head
- Lifting lug
- Lining
- Lock washer
- Tightening bolt cover

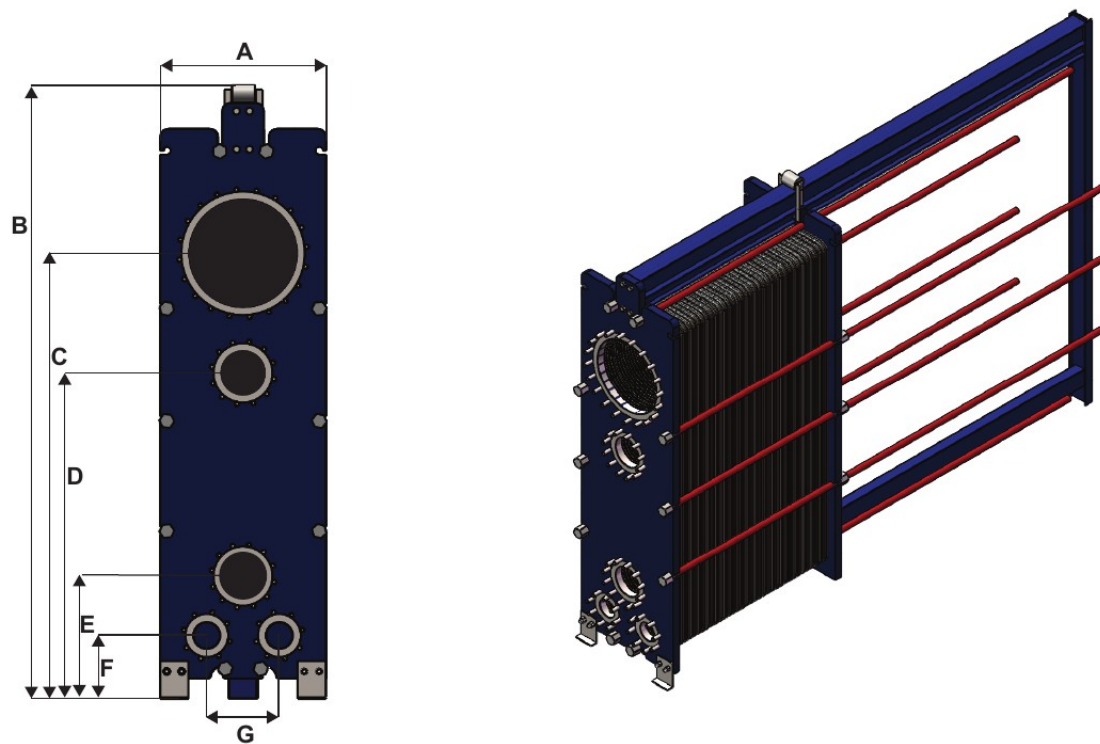
Flow principle



Working principle

HEXNOVAS GPHE condenser is tailored for vacuum condensation. The large vapour inlet connection is placed centrally on the top and the smaller condensate outlet on each side in the bottom. The two medium sized connections for cooling media are centrally placed in the middle, which gives it a symmetrical design.

It uses the cassette concept with the plates welded in pairs. The vapour is condensed in the welded channel while plate pattern is specifically designed for optimal condensation, with an asymmetric channel configuration that features a large gap on the vapour side and the small gap on the cooling water side. This makes it possible to maintain a very low pressure drop on the vapour side while still keeping up the velocity and turbulence on the cooling water side, thus maximizing the heat transfer efficiency and minimizing fouling.



Dimensional drawing
Measurements mm (inches)

Model	A	B	C	D	E	F	G
AC400-W	617	2217	1658	1215	457	236	270
AC600-W	888	2860	2085	1470	657	393	455

Technical Data

Plates	Type	Free channel,mm (in)
AC400-W	Semi-welded	11/3 (0.43/0.12)
AC600-W	Semi-welded	11/3 (0.43/0.12)

Materials

Heat transfer plates	304/316L Stainless
Field gaskets	NBR, EPDM, FKM
Ring gaskets	NBR, EPDM, FKM
Flange connections	Matal lined, stainless steel
Frame and pressure plates	Carbon steel epoxy painted

Operation Data

Model	Max. design pressure (bar/psig)	Max. design temperature (°C/°F)
AC400-W	10 bar / 145psi	160 °C / 320°F
AC600-W	10 bar / 145psi	160 °C / 320°F