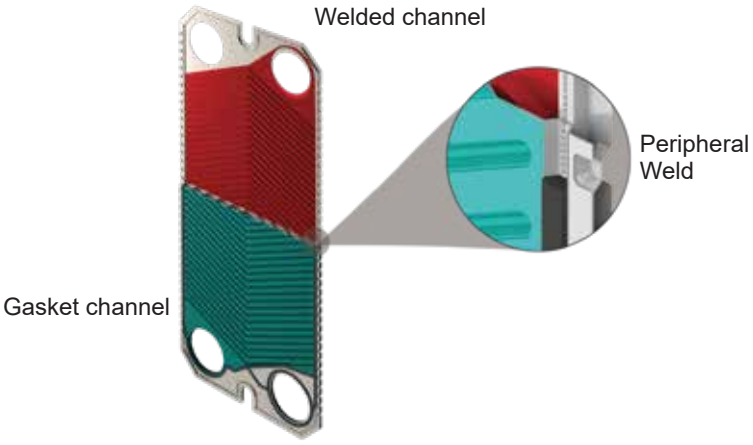
Semi-weld Plate heat exchanger



Semi-weld PHE

Semi-welded plate heat exchangers are commonly used in applications where there is a risk of cross-contamination between different fluids due to leaks or cracks in the heat exchanger. They are ideal for applications that require high heat transfer efficiency, such as refrigeration and cooling, heating, and HVAC systems.

The semi-welded plate heat exchanger consists of two types of plates: fully welded plates and gasketed plates. The fully welded plates are used to form the channels for the high-pressure and high-temperature fluids, while the gasketed plates are used to separate the fluids and form the channels for the lower-pressure fluids. This design provides the advantages of both fully welded and gasketed plate heat exchangers, while eliminating their disadvantages

What is Semi-weld PHE?

The Semi-weld Plate heat exchanger plates are welded by laser. the laser welding means that metal is melted by a laser beam from a high power laser. The charge is protected by irert gas Additional welding meterial is not required.

Applications

- Chemicals
- Energy and Utilities
- Food&Beverages
- HVAC& Refrigeration
- Marine and Transportation
- Mining
- Pulpand Paper
- Steel
- Water and Waste treatment

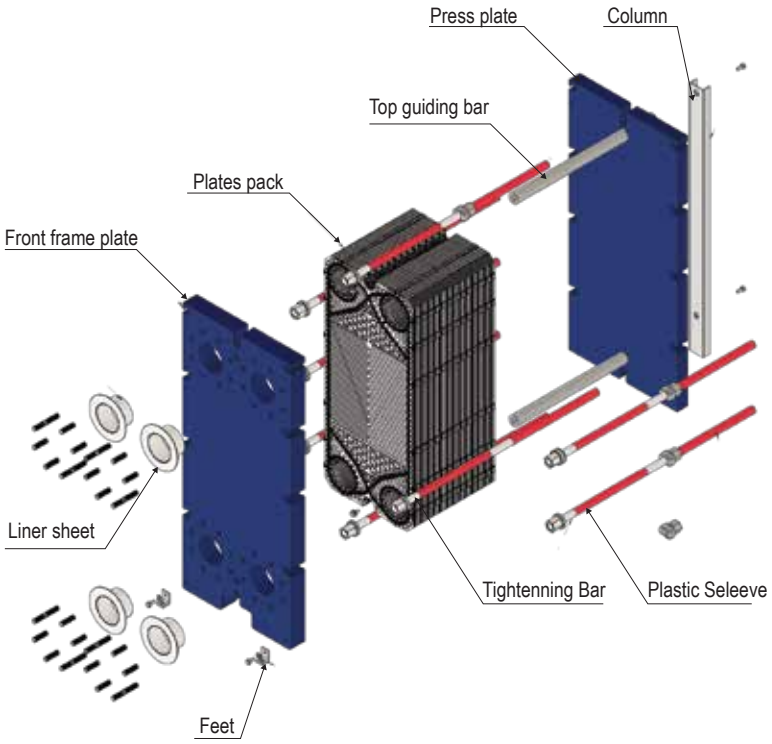
Benefits

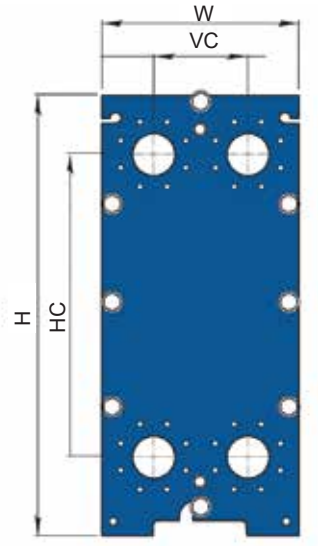
- High heat transfer efficiency: due to their large surface areaand turbulent flow paths.
- Low risk of leakage: The fully welded channels reduce the risk of leakage and cross-contamination between different fluids.
- Easy maintenance: Semi-welded plate heat exchangers can be easily disassembled and cleaned, allowing for easy maintenance and reduced downtime.
- Versatile: Semi-welded plate heat exchangers can be used in a wide range of applications, including refrigeration and cooling, heating, and HVAC systems.

Features

- Clip-on gasket
- Lifting lug
- Lining
- Lock washer
- Tightening bolt cover

Semi-weld PHE construction

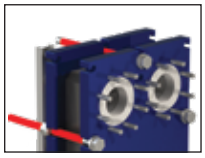
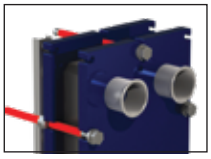
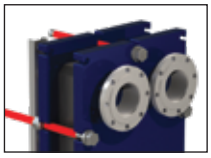
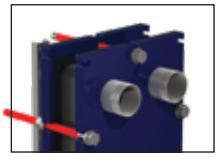




Technical Data

Material	
Plates	304/ 316L stainless, Ti
Field Gasket	NBR, EPDM, FKM
Ring Gasket	NBR, EPDM, FKM
Flange connections	Carbon steel, Metal lined: Stainless, Ti
Frame plate	Carbon steel, epoxy painted

Connections Available

Model	B60MW	B100BW	B150BW	B200BW
Height. H [mm]	920	1045	1484	2150
Width, W [mm]	320	454	650	750
Max Length, L [mm]	1445	1795	3246	3250
Vertical Port Distance, VC [mm]	640	719	1044	1478
Horizontal Port Disance, HC [mm]	140	225	298	353
Max Temperature [°C]	180	180	180	180
Max Pressure [bar]	16/20	16/20	16/20	16/20
Port Size	DN50/2"	DN100/4"	DN150/6"	DN200/8"
Channel depth [mm]	3	2.5	2.5	2.5
Max Water flow rate [kg/s]	16	50	80	225