

SEMI WELDED PLATE HEAT EXCHANGER

HIGH ENERGY EFFICIENCY

What is a Semi-Welded Heat Exchanger?

Semi-welded heat exchangers are special types of heat exchangers used to provide heat transfer and combine the characteristics of both welded and plate heat exchangers. This type of heat exchanger is often used in industrial applications and in systems that require high performance.

Plate packs are formed by joining two separate plates flat on top of each other by laser welding. This heat exchanger model, which is assembled by placing a gasket between each plate pack, provides the advantages of the traditional type plate gasketed heat exchanger and can also be easily used in applications where sealing plays a major role.



Advantages

■ High Heat Transfer Efficiency

Thanks to the plate structure and welded zones, it provides high heat transfer efficiency. This allows energy to be transferred efficiently and increases energy savings.

■ High Pressure Resistance

The welded zones are designed to withstand high pressures. This ensures safe operation of the heat exchangers with high pressure fluids. It offers reliable performance, especially in applications requiring high pressure.

■ Sealing and Safety

Welded zones increase the sealing between the plates. This prevents mixing of fluids and leaks. The sealed structure of the heat exchanger supports safe and efficient operation. It is preferred in applications where sealing is critical.

■ Corrosion Resistance

Corrosion-resistant materials are generally used in semi-welded heat exchangers. This is especially advantageous for corrosion-prone situations such as aggressive chemical environments and sea water.

■ Compact Design

Thanks to its plate structure, it has a more compact design and saves space. This is ideal for use in limited spaces. It provides high performance in smaller spaces, thus saving installation space and costs.

■ Easy Cleaning and Maintenance

The gaps between the plates and the structure facilitate cleaning processes. It is especially advantageous for systems that need to be cleaned frequently. The plates are detachable, making maintenance and repair easier.

■ Flexibility and Customization

It can be customized with different capacities and material options, making it suitable for various industrial requirements. It is suitable in many sectors such as energy, chemical, food processing and HVAC.

■ Energy Efficiency

High heat transfer efficiency reduces energy consumption and saves energy. This reduces operating costs.

■ Performance Stability

Provides high performance and efficiency under long-term operating conditions. This ensures continuous and reliable heat transfer.

Areas of Application

Tanpera Semi-Welded Plate Heat Exchangers provide energy savings in different industries with its durability and high efficiency. Thanks to its compact structure and flexible design, it offers cost and space savings, while offering reliable performance in many sectors such as chemical, energy and beverage.



Food

In vegetable oil processing; it is preferred for the different gasket requirements of the two fluids in steam/vegetable oil heating applications.



Desuperheater

It is the application of energy recovery by gas cooling of the refrigerant gas in the superheated vapor phase in cooling systems.

Chemistry

It is used especially in heating & cooling processes of solvent based fluids where gasket strength is limited.



Evaporation, Condensation Applications

It provides high efficiency in the processes of evaporation and condensation of liquids. It plays an active role especially in cooling and heat recovery systems.



Petrochemicals

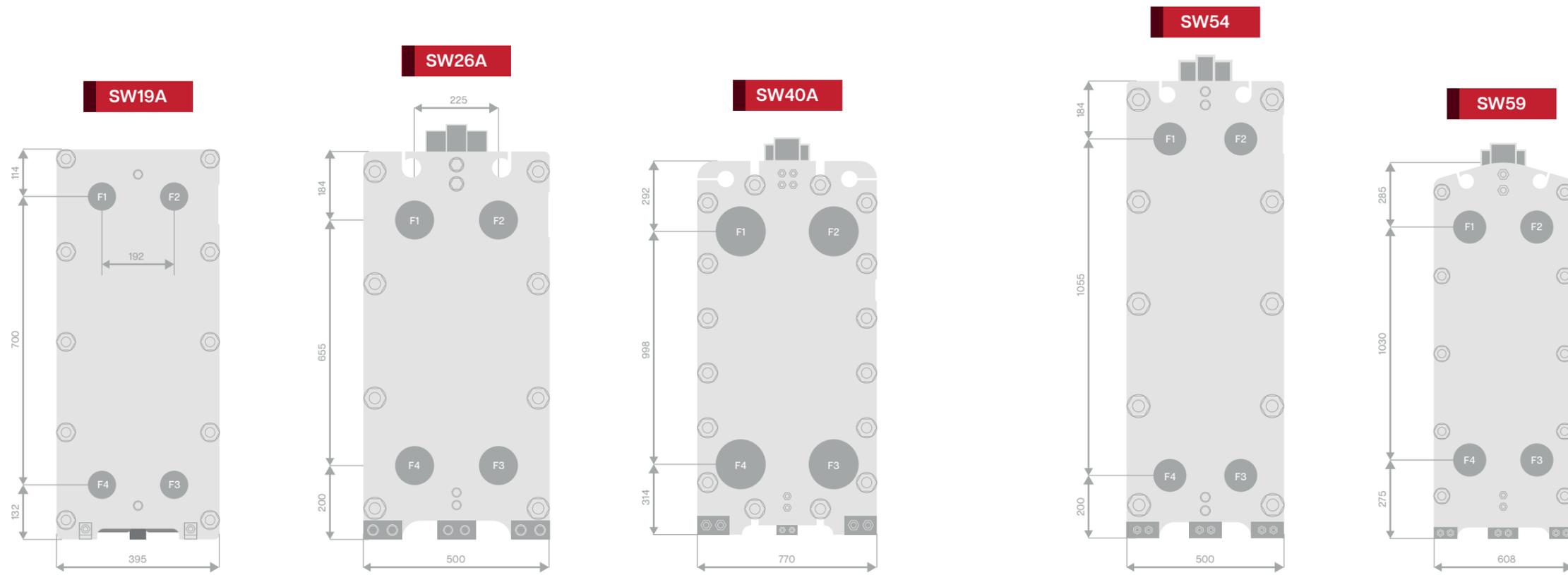
Safe heat transfer under high pressure and temperature conditions. Increases efficiency in processes such as natural gas liquefaction and crude oil processing.



Power Plants

Semi-welded plate heat exchangers offer high efficiency for steam circuits and cooling systems in power generation. They provide reliable heat transfer under high pressure and temperature, increasing operational efficiency in power plants.

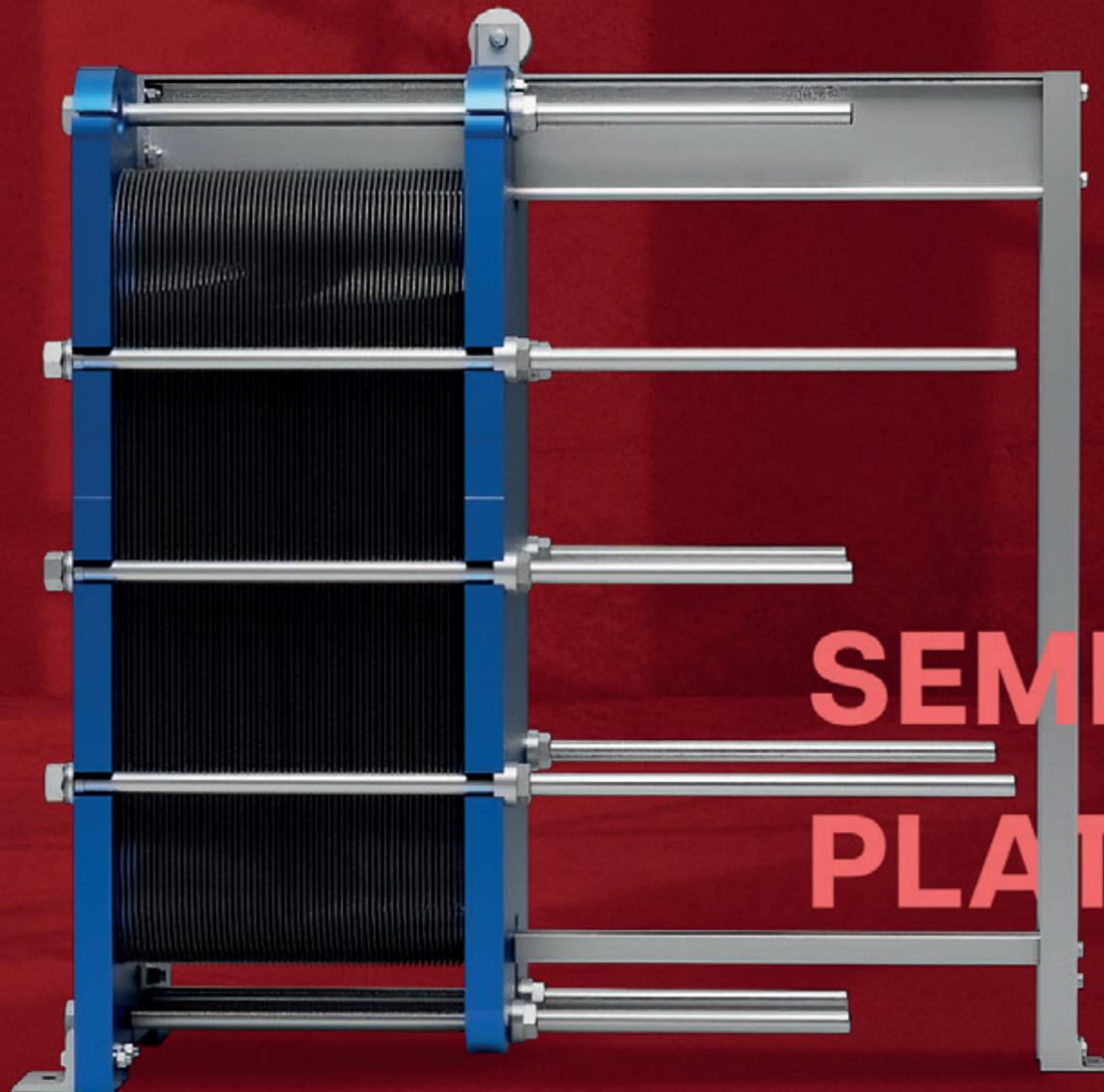
Product Family



Semi-Welded Plate Heat Exchanger Technical Specifications

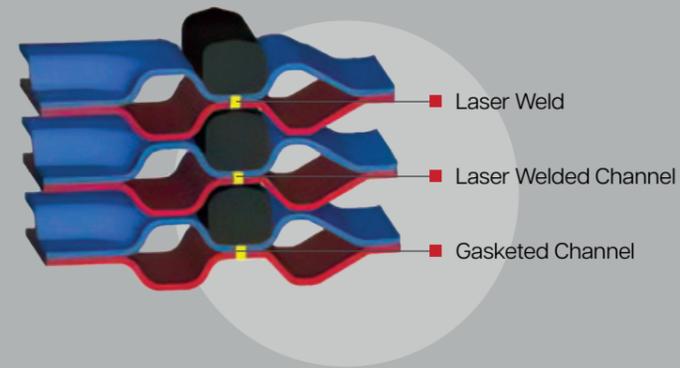
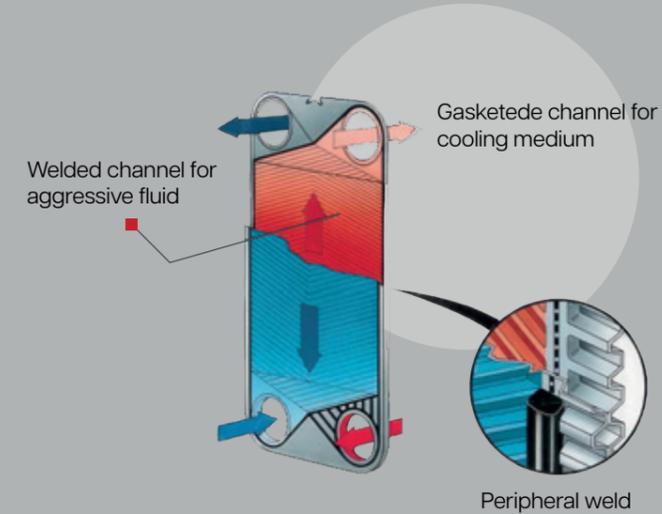
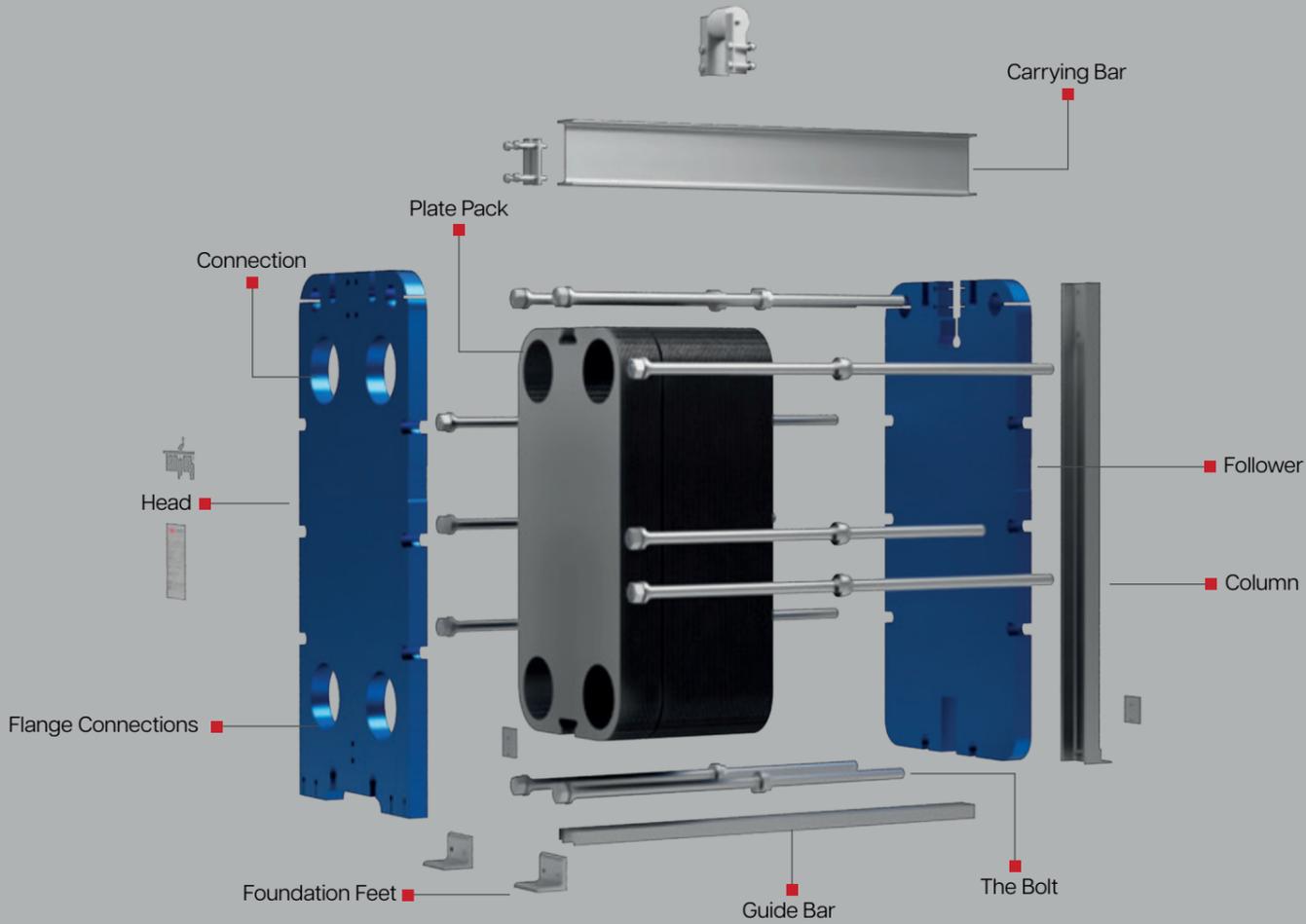
Model	SW19A	SW26A	SW40A	SW54	SW59
Height	820	800	1208	1242	1208
Width	304	378	378	502	664
Distance Between Connection Axes	700 x 192	655 x 225	1055 x 225	1030 x 296	988 x 395
Connection Diameter	65	100	100	100	200

Product Features	
Fluid	Liquid, Ethylene Glycol, Chemical, Oil, Food
Min/Max Working Pressure	16/40 Bar
Min/Max Operating Temperature	-20/160 C
Connection Diameter	DN65 / DN200
Connection Class	EN1092-1-PN16/25/40
Connection Material	Stainless Steel / Titanium
Plate Material	AISI304/AISI316/Titanium
Plate Thickness	0,5 mm up to 16 Bar / 0,6 and 0,7 mm up to 40 Bar
	NBR HT / EPDM HT
Ring Gasket	NBR, EPDM, Viton, PTFE, Kloropren
Design Code	EN13445 / ASME VII, Sec.1



**SEMI WELDED
PLATE HEAT EXCHANGER**

Semi Welded Plate Heat Exchanger Internal Structure





Kalbinden 40°C'de gelen kan ile ayaklarından 1°C'de dönen kan arasında etkin bir ısı deęişimi gerçekleştirerek, soğuk sularda uzun süre donmadan kalabilir. Bu doğa harikası prensipleri kullanarak, bizler de mühendislik harikası ısı deęiştiricilerimizi tasarlıyoruz.

Tanpera Turkey

+90 850 308 0114

Şeyhli Mh. Ankara Cd. No: 380/C
34906, Pendik, İstanbul, Türkiye

info@tanpera.com.tr

www.tanpera.com.tr

Tanpera GmbH

+49 1590 4138428

Hermann-Essig-Str. 36 71701
Schwieberdinge, Stuttgart, Germany

info@tanpera.de

www.tanpera.de

Tanpera A.Ş. - www.tanpera.com.tr - info@tanpera.com.tr - +90 850 308 0114

Tanpera assumes no responsibility for errors or omissions that may appear in catalogs, brochures, or other written/digital materials. Tanpera reserves the right to make changes to its products and technical specifications without prior notice. These changes may also apply to products that have already been ordered. All trademarks mentioned in this document are the property of their respective companies. Tanpera and the Tanpera logo are registered trademarks of Tanpera A.Ş. All rights reserved.

© 2025 | Tanpera A.Ş. | TAN-WPHE-BRO/01 | 2025.12