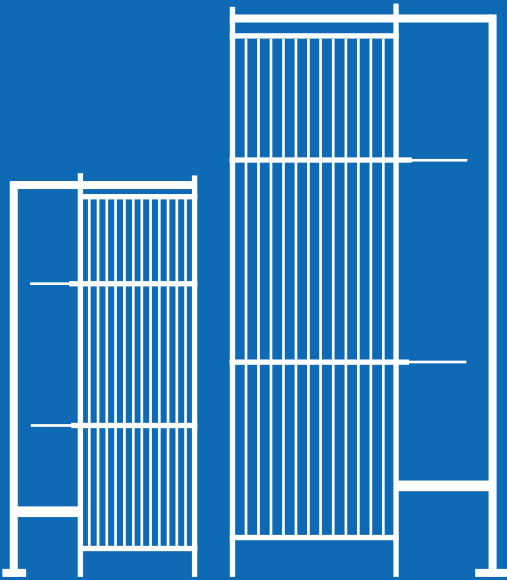


GASKETED PLATE HEAT EXCHANGER





ABOUT US

Refkar is a leading supplier of freon systems and heat transfer products in the Turkish market. It targets to position itself in the gasketed plate heat exchanger market drawing on its 15 year experience.



OUR FACTORY

It performs production in international standards with its 3,500 m² closed factory area established on 6,500 m² outdoor area, advanced technology production systems, and trained operator staff.



COMPETENT STAFF

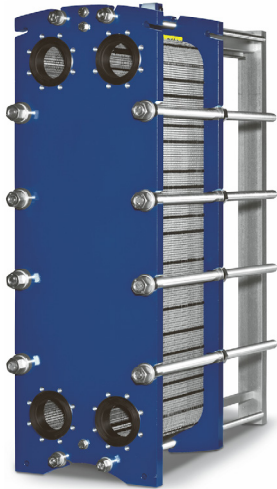
Since its establishment, Refkar has worked with a highly skilled team. It has trained and developed its employees within the framework of their competencies.



FAIRS AND TRAVELS

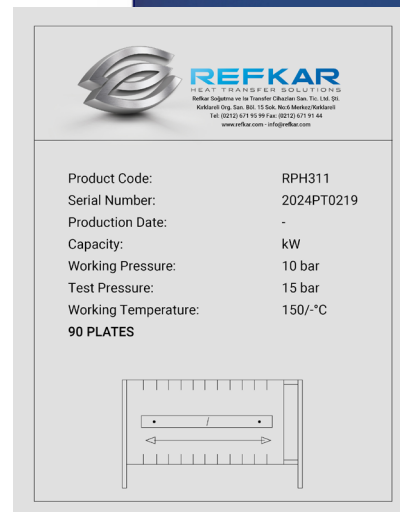
Refkar has conducted business trips, partner visits, and participated in fairs to more than 50 countries. As a result, it has succeeded in becoming a recognized brand in the international market.





Refkar plate heat exchanger label on the front chassis provides information on;

- Heat exchanger model,
- Heat exchanger production ID,
- Heat exchanger capacity,
- Heat exchanger maximum & minimum operating temperature,
- Heat exchanger test & operating pressure,
- Heat exchanger minimum tightening level.



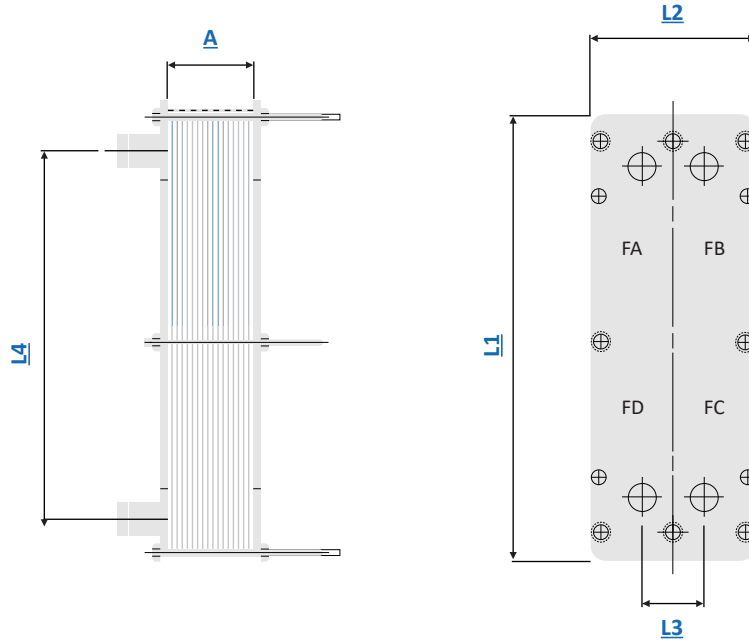
Refkar Plate Heat Exchangers are used in manufacturing and heating-cooling systems. Having adopted customer satisfaction as its main principle, Refkar also renders services for customer-focused projects under various operating conditions in addition to its standard product range.

Operating Principles of Refkar Plate Heat Exchangers

Plate heat exchangers operate on the principle of transferring heat between two fluids which have different temperatures. Heating fluid and heated fluid are fully separated with plates. Standard plate heat exchangers are equipped with four input-output ports; two for heating fluid and two for heated fluid. Special heat exchangers with multiple heating and heated fluids can be manufactured.

Refkar plate heat exchangers consist of the following;

- Front chassis with input-output connections and data,
- Lower and upper bearing shafts to fix the plates,
- Primary plate preventing contact between the fluid and the chassis,
- Flow plates allowing the passage of fluids and providing heat transfer,
- Fully-closed final plate preventing contact between the fluids and the rear chassis,
- Rear chassis moving on the shafts,
- Studs and washers which keep the plates at a certain tightening level.

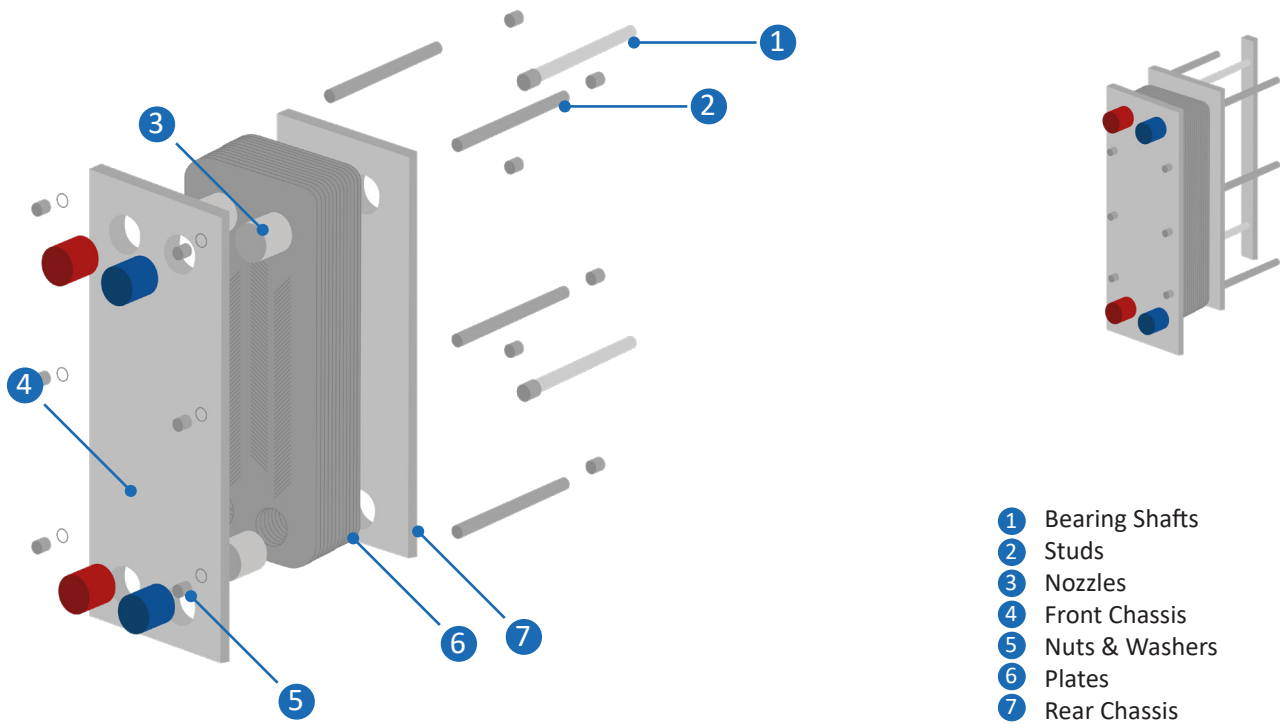


MODEL	RPH302	RPH303	RPH305	RPH306	RPH307	RPH310
Width (mm) L2	140	180	245	320	320	470
Height (mm) L1	380	480	737	920	1299	1084
Depth Min.-Max. (mm) A	250-500	250-500	250-1000	250-2000	350-2500	350-2500
Horizontal Axis Gap (mm) L3	50	60	100	140	140	225
Vertical Axis Gap (mm) L4	298	357	553	640	1036	719
Operating Pressure (bar)	10	10	10	10	10	10
Test Pressure (bar)	15	15	15	15	15	15
Connection Diameter	3/4"	1 1/4"	2"	2"	2" Dişli/Flanş	4"

MODEL	RPH311	RPH315	RPH320	RPH321	RPH325	RPH330
Width (mm) L2	480	650	780	800	920	1170
Height (mm) L1	1923	1885	2150	1405	2895	2882
Depth Min.-Max. (mm) A	350-2500	500-4000	500-4000	500-4000	500-5000	500-5000
Horizontal Axis Distance (mm) L3	225	298	353	363	439	596
Vertical Axis Distance (mm) L4	1338	1294	1478	698	1939	1842
Operating Pressure (bar)	10	10	10	10	10	10
Test Pressure (bar)	15	15	15	15	15	15
Connection Diameter	4"	6"	8"	8"	10"	12"

Materials Used in Plate Heat Exchangers	
Plate Material	AISI 316, Titanium, Hastelloy
Connection Material	Carbon Steel, Stainless Steel, Plastic
Connection	Connection diameters ranging from DN25 (¾") to DN500 (20") are possible.
Connection Type	Threaded, flanged, or union connections are available.
Chassis Material	Carbon Steel, Stainless Steel
Gasket Material	EPDM, EPDM-HT, NBR, H-NBR, VITON, VITON-G
Design Temperature	35°C to 200°C operating temperature range

COMPONENTS OF REFKAR PLATE HEAT EXCHANGER



- 1 Bearing Shafts
- 2 Studs
- 3 Nozzles
- 4 Front Chassis
- 5 Nuts & Washers
- 6 Plates
- 7 Rear Chassis

EASY SERVICE & MAINTENANCE
• Safety Washer
• Provision Flanges
• Stud Conduits
• Fixing Legs
YOUR TRUSTED BRAND
• Complete Stainless Chassis
• Rubber Nozzle around the Chassis
• Gaskets
HYGIENE APPLICATIONS
• Test Mark on Chassis
• CE Mark on Chassis
• Capacity Fixing Legs
LONGER USEFUL LIFE
• EPDM, EPDM-HT, NBR, H-NBR, VITON, VITON-G Gaskets
• AISI 304, AISI 316, Titanium, Hastelloy Plates



Standard Plates

These are used in Refkar plate heat exchangers in standard applications for hot running water provision, low-pressure steam applications and domestic heating. It is the best solution for such applications with special distribution channels, types designed with wide and narrow angles based on the requirements and special plate depths for maximum efficiency and minimum pressure losses.

Semi-Welded Plates

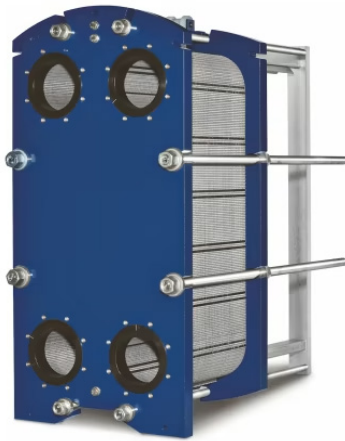
The useful life of gaskets may be extremely short in case of aggressive fluids or high temperatures. For such applications, Refkar semi-welded plates where two plates are laser-welded rather than using gaskets at the side of the aggressive fluid are recommended. At the other side of the heat exchanger, the fluid passes through a surface with gaskets as in the standard heat exchangers. This ensures safety of the system and easy maintenance on the heat exchanger.

Wide-Gap Plates

In certain applications, the fluids which will pass through the heat exchanger contain solid particles. With the wide-gap plates specifically designed by the Refkar team for such applications, the particles present in the fluid will not stick to the channels inside the heat exchanger and the level of pollution is minimized. These plates are designed with wide gaps and thicker as compared to standard plates. This increases resistance against corrosive elements which may be present in the fluid. It is especially used to ensure optimal efficiency in waste water recovery in the textile industry.

Double-Walled Plates

If the two fluids used in the process should never mix, Refkar double-protected plates ensure that the system is fully secure. In these heat exchangers, two plates are combined without welding and the fluid smoothly flows between them. In case of a leak, the fluid will leak out between the two plates without mixing with the other fluid and prior intervention will be possible. Thanks to its similarity with heat exchangers with standard gaskets, it is easy to remove and clean.



Professional-Plate Heat Exchanger Services

In addition to manufacturing plate heat exchangers, Refkar offers maintenance services for all brands and models of heat exchangers. The contents of Professional Services are defined based on the needs to ensure that the system continues to operate with the same performance.

Possible Problems on Plate Heat Exchangers

- Diminished performance due to scaling
- Clogging due to sediment and residue from the plumbing
- Extreme pressure loss due to clogging
- Diminished heat transfer due to clogging
- Wear of gaskets over time
- Failure of the gaskets to seal
- Deformation of plates due to corrosion
- Deformation of the chassis due to internal and external factors

If you experience any of the problems mentioned above in your heat exchanger system, all you have to do is to contact our professional services department.

Contents of the Professional Service Package

- Provision of plates for all brands and models
- Provision of gaskets for all brands and models
- Revision and cleaning of heat exchange chassis
- Quick and detailed cleaning of heat exchange plates
- Descaling of heat exchange plates with special chemicals
- Provision and manufacturing of heat exchanger nuts and studs
- Delivery of the heat exchanger in an operating condition
- 24/7 uninterrupted services



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