

ELGE TECHNOLOGIES

Industrial Plate Heat Exchangers

Application:

Gasketed plate heat exchanger for applications with aggressive media that might exceed the limits of gasket seals. Well-suited for ammonia applications in:

HVAC refrigeration chemical food

Benefits:

Ideal for Ammonia-based Systems—

- Plates are laser-welded in pairs, eliminating the gaskets between them, allowing the use of ammonia and other media that would normally exceed the limits of standard gasketed plate heat exchangers.
- The greater efficiency of the LWC means a smaller ammonia charge, reducing cost and maintenance.

Versatility—

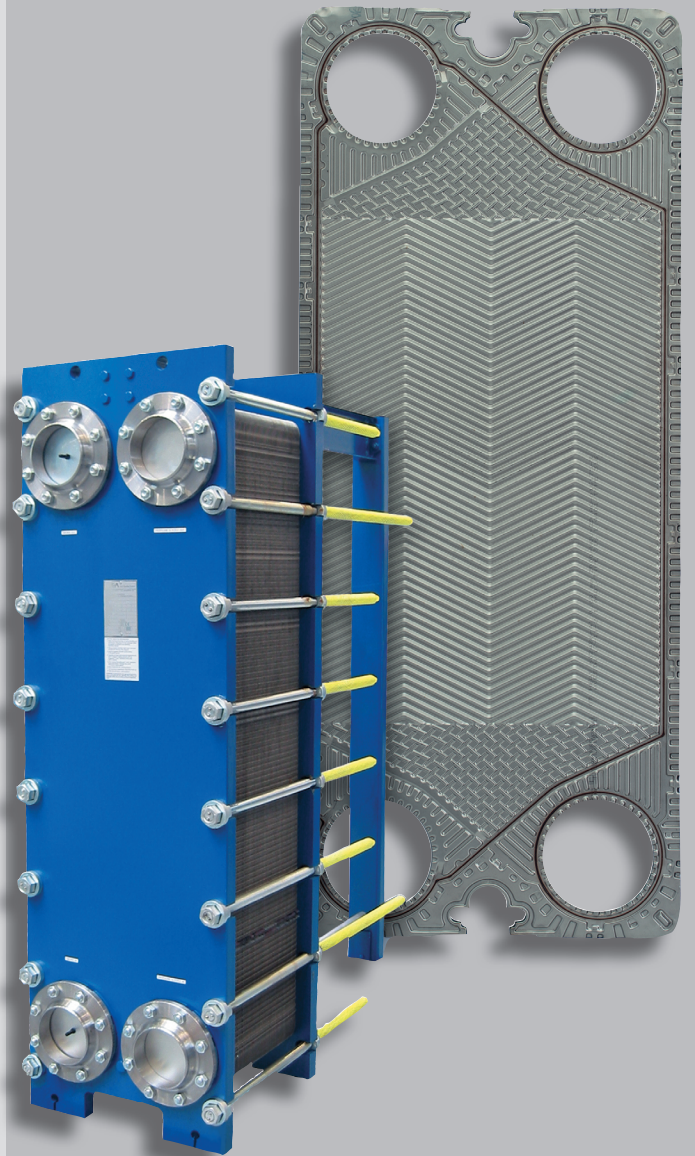
- A variety of sizes and materials combines with sophisticated selection software to ensure perfect customization.
- The compact footprint allows you to use it in locations that you wouldn't dream of with a shell-and-tube heat exchanger.

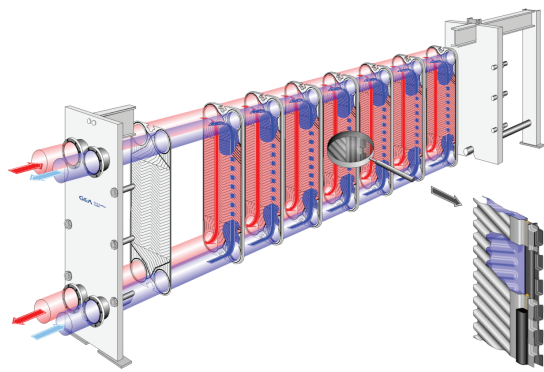
Higher Performance at a Lower Cost—

- Elge plate corrugations distribute the media evenly across the entire plate width, maximizing heat transfer and minimizing the number of plates (and cost) required.

Peace of Mind—

- Over 75 years of experience in designing and crafting high performance plate heat exchangers.
- **Convenient Maintenance—**
- Tools-free gaskets make gasket replacement a snap.
- Individual plates mean no heavy lifting tools. The result is faster, more efficient maintenance, with shorter down times.





High Technology Overcomes Aggressive Media.

The LWC brings the impressive performance of plate heat exchangers to work with aggressive media like ammonia refrigerants. The aggressive media (shown in blue at left) passes inside the Laser Welded Cassettes, while the other media (shown in red at left) passes between the cassettes. The result?

- Excellent compatibility with critical media.
- Reliable performance in a demanding application.
- Smaller refrigerant charge needed.
- Big performance in a small package.
- All the maintenance and servicing benefits of gasketed plate heat exchangers.

Technical Details:

Heat Transfer Plate Material: 316 Stainless as standard. Optional Titanium grade one, Hastelloy C-276, SMO 254, Alloy 686, Alloy 59, Stainless 904L. Available with oxygen-free welding for added corrosion resistance.

Gasket: NBR, NBR High Temperature, EPDM, EPDM High Temperature, Viton, and others on request.

Port Connection: Metal Lined (Stainless, Titanium and others on request), Welded Neck Flange and others on request.

Pressure Plate: Carbon Steel and others on request.

Maximum Pressure: Maximum standard pressure for the refrigerant side is 360 psig (25 barg). Maximum standard pressure is 225 psig (16 bar) for the non-refrigerant side.

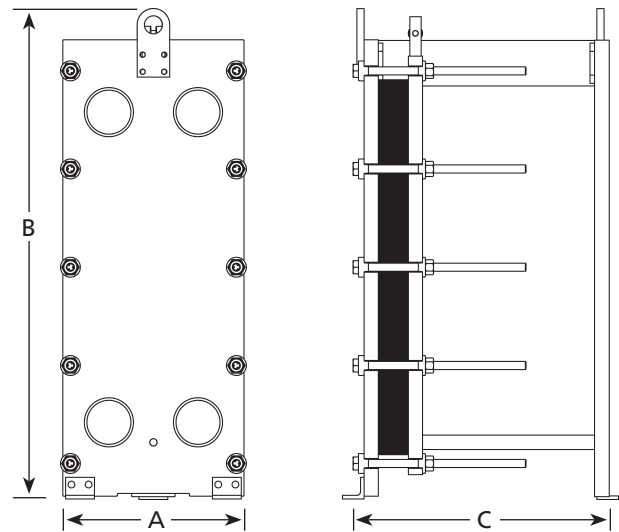
Temperature Range: Varies with the media and gasket selection. Maximum is 300°F (150°C). Minimum is -49°F (-45°C). Contact us for details.

Rated Liquid Flow Rate:

LWC100: 682 gpm

LWC150: 1541 gpm

LWC250: 3960 gpm



Model	Connection Size	Dim. A	Dim. B	Dim. C
LWC 100 T	4" nominal (DN 100)	21.3" (540mm)	44.9" (1140mm)	Up to 107.9" (2740mm)
LWC 100 M			60.9" (1546mm)	Up to 84.3" (2141mm)
LWC 100 X			76.9" (1952mm)	Up to 84.3" (2141mm)
LWC 150 S	6" nominal (DN 150)	25.1" (638mm)	67.6" (1716mm)	Up to 108.3" (2750mm)
LWC 150 L			86.5" (2196mm)	Up to 108.3" (2750mm)
LWC 250 S	10" nominal (DN 250)	35.2" (895mm)	87.5" (2222mm)	Up to 107.8" (2738mm)
LWC 250 L			110.8" (2815mm)	Up to 108" (2743mm)