

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: 0.6 mm, 316 Stainless Steel as standard. Optional 304 Stainless Steel, Titanium grade one, Hastelloy C-276, SMO 254, Alloy 686, Alloy 59, Stainless 904L. Available with oxygen-free welding for added corrosion resistance.

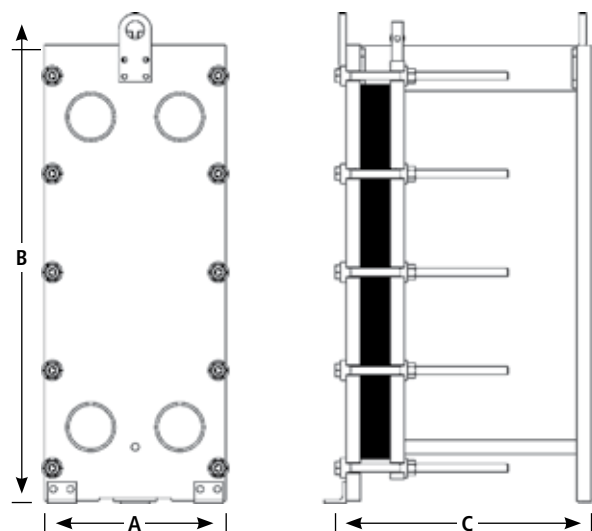
Gasket: Neoprene, NBR, NBR High Temperature, EPDM, EPDM High Temperature, Viton, and others on request.

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

Pressure Plate: Carbon Steel and others on request.

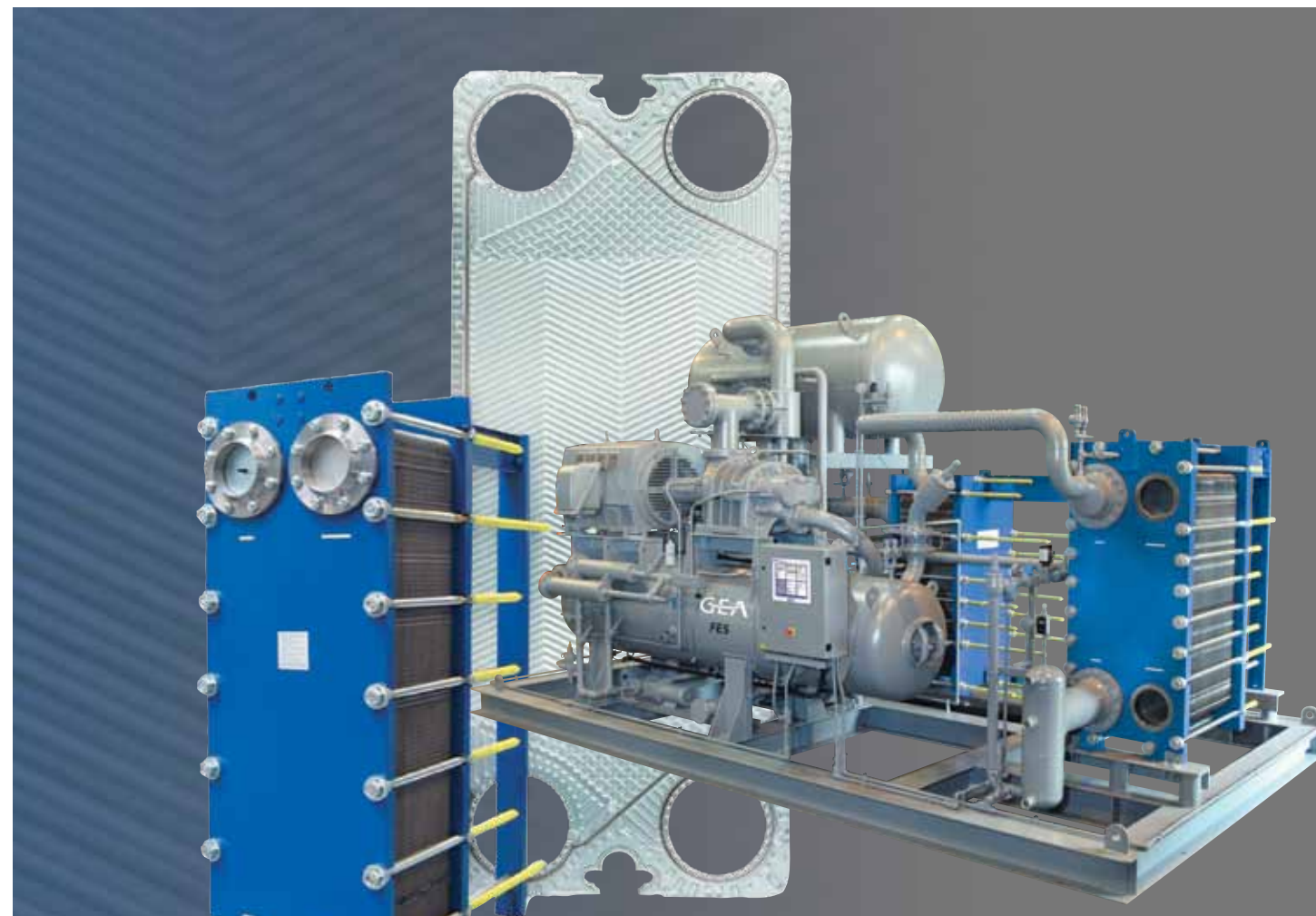
Maximum Pressure: Maximum standard pressure for the refrigerant side is 300 psig (25 bar). Maximum standard pressure is 225 psig (16 bar) for the non-refrigerant side.

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. Standard design temperature is -20° to 200°F.



Rated Liquid Flow Rate:

- LWC100: 682 gpm (155m³/hour)
- LWC150: 1541 gpm (350m³/hour)
- LWC250: 3960 gpm (900m³/hour)
- LWC350: 8380 gpm (1,900m³/hour)



LWC Series Welded Pair Plate Heat Exchangers

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)
LWC 350 S	14" nominal (DN 350)	44.7" (1134mm)	115.4" (2930mm)	Up to 238" (6045mm)

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LWC Series Welded Pair Plate Heat Exchangers

Ideal for Ammonia-based Systems–

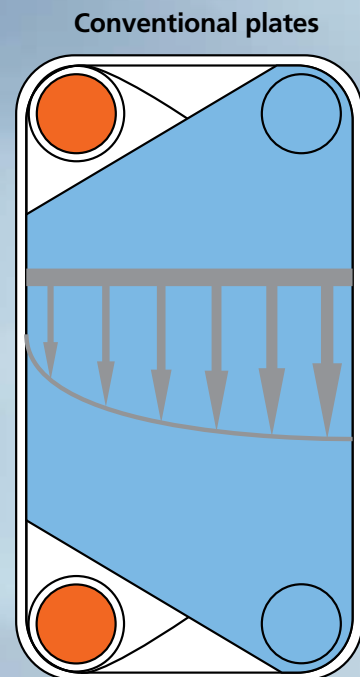
- Plates are laser-welded in pairs allowing the use of ammonia and other media that would normally exceed the limits of standard gasketed plate heat exchangers.
- The greater efficiency of the LWC means a smaller ammonia charge, reducing cost and maintenance.

Versatility–

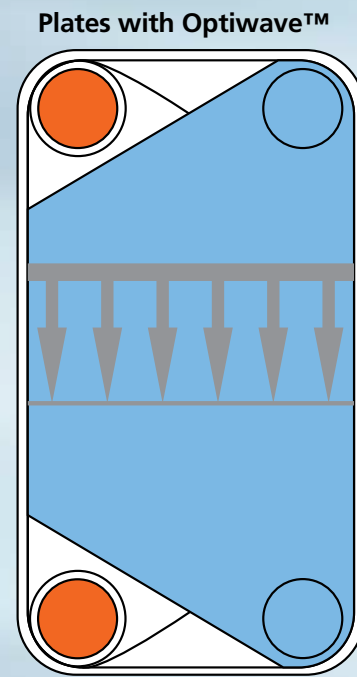
- The right design...not just a “good enough” design. A variety of sizes and materials combined with sophisticated selection software to ensure perfect customization.
- The compact footprint allows you to use it in locations that could not accommodate a shell-and-tube heat exchanger.

Higher Performance at a Lower Cost–

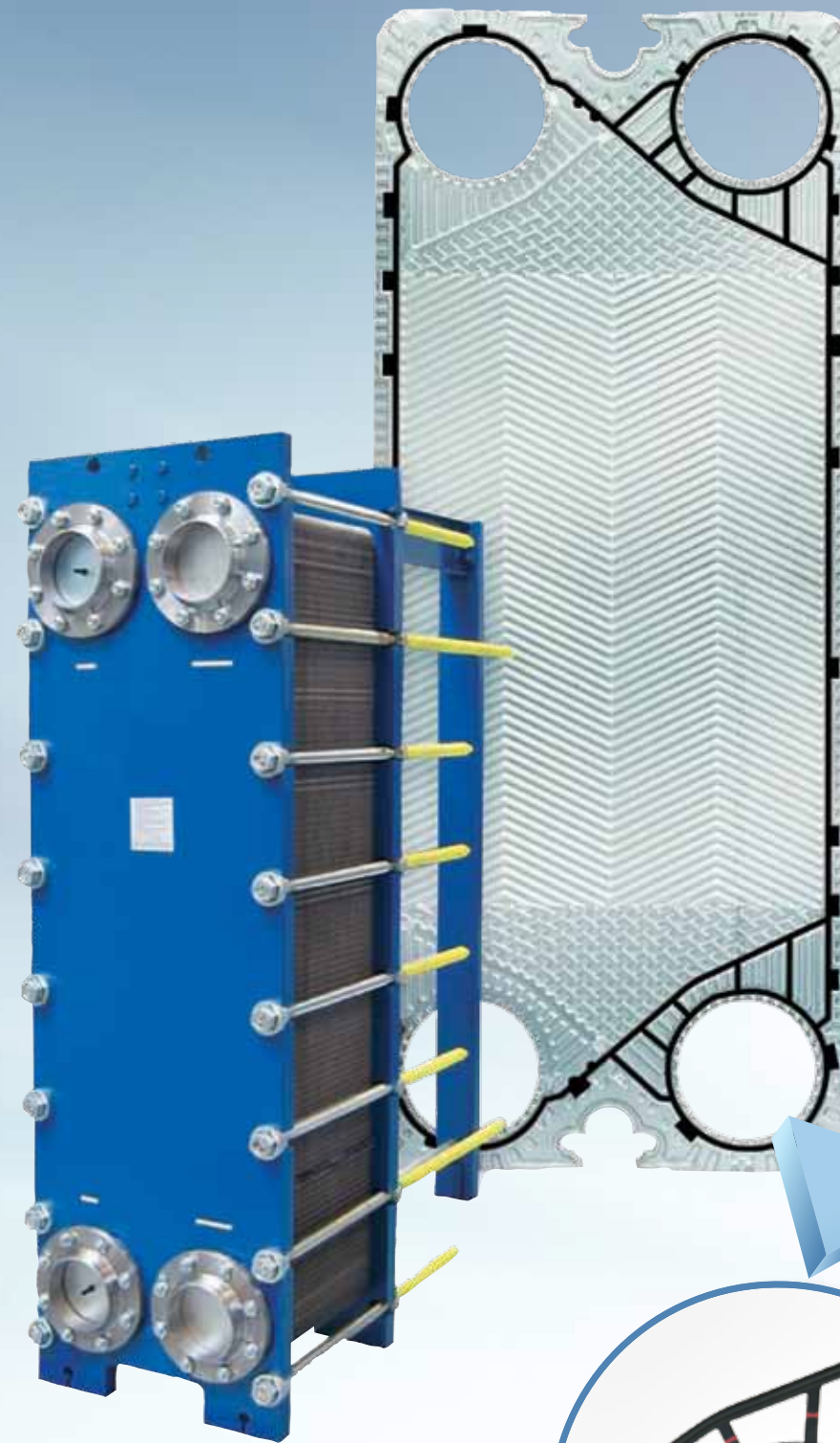
- Optiwave™ plate corrugations distribute the media evenly across the entire plate width, maximizing heat transfer and minimizing the number or plates required.



Low velocity at far corner reduces plate performance



Even velocity across the plate width



Single-Piece Gasket Design–

- Neoprene ring gaskets for ammonia.
- EPDM gaskets for glycol.
- Other material available as required.

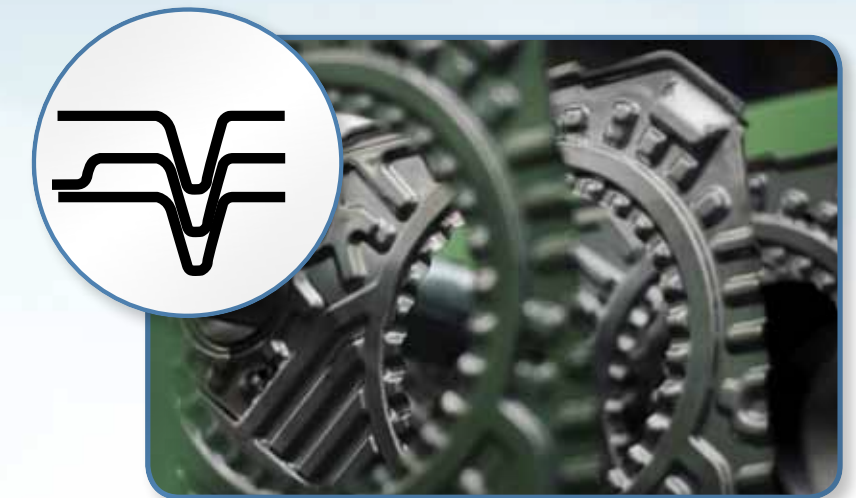
Peace of Mind–

- Over 75 years of experience in designing and crafting high performance plate heat exchangers.
- Independent certification through ASME and other programs.

Convenient Maintenance–

- PosLoc™ plate lead-ins cause the plate pack to self-align when re-installing during maintenance.
- EcoLoc™ 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.

PosLoc™ Self Aligning Plates



Glueless Gasket Design–

EcoLoc™ Glueless Attachment

