

C3R chiller condensers

Raise chiller capacity with Alfa Laval heat exchangers



Condensation in the chiller system is most often performed in a set of large shell-and-tube heat exchangers. These condensers are often designed with a tight temperature approach, making performance very sensitive to scaling and fluctuating cooling-water temperatures. The results are high maintenance costs and production loss.

Fluctuating chiller load over the year leads to variations in the velocity of the incoming gas. This may cause vibrations and damages in the tube bundle, leading to unplanned repairs.

Alfa Laval can supply customized solutions that help solve these problems and boost capacity. Alfa Laval has long experience in industrial refrigeration and can deliver everything from a single booster condenser to complete systems including vaporizer and condensers. Compabloc's high thermal efficiency and low pressure drop makes it ideal for condensing duties, especially where space is limited. Its compact size means it is easily added to existing systems to remedy capacity problems.

Cleaning intervals for shell-and-tube condensers can be prolonged by installing a Compabloc as a booster. When fouling starts to build up or the cooling water temperature rises, Compabloc compensates for the capacity loss in the shell-and-tubes.

The robust, all-welded design makes Compabloc insensitive to vibrations, eliminating the need for repairs. The highly turbulent flow means it is much less prone to fouling on the cooling-water side, and keeps cleaning to a minimum.

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Combat capacity limitations with a booster condenser, either in parallel or series.



Key Facts:



Design temperature 400°C (752°F), down to -100 °C (-148°F) Design pressure From full vacuum to 42 barg (600 psig)

 Maximum heat transfer area

 840 m² (8,985 ft²)

 Material of construction

 316L, SMO254, 904L (UB6),

 Titanium, C-276/C-22/C-2000

Learn more at www.alfalaval.com/compabloc

Duties

Heat recovery, cooling, heating, condensation, partial condensation, reboiling, evaporation and gas cooling.

Unique features

Compabloc is the champion of heat exchange thanks to unique Alfa Laval innovations that enable reliable, efficient performance, letting you save energy and improve sustainability.



SmartClean

XCore

Fast and efficient flushing of fouling material

C-Weld Superior cleaning and extended performance



Advanced design for higher pressures



ALOnsite Qualified support at your facility

PPI00526EN 1904

Alfa Laval reserves the right to change specifications without prior notification.