Spare Parts for Maintenance

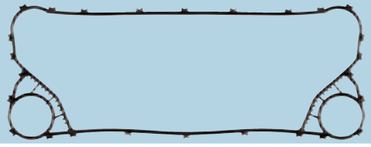
Every plate and gasket is available for purchase, for customers who would like to perform maintenance on their own. We also provide all other PHE parts that can be replaced, such as tightening bolts and nuts, rubber boots, frames, and nozzles. Please contact HISAKA or a nearby distributor about maintenance.

Gaskets

Periodical replacement is recommended. For more information about regasketing, refer to the "Operation and Maintenance Manual" and the "Gasketing Manual".

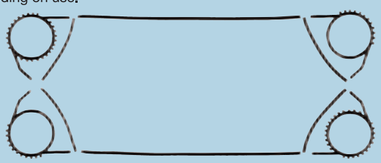
Plate Gasket

This gasket is used for plates. The material used differs depending on use. There are two types of gaskets: one is a glue type and the other is a glue free (slit-in) type.



D-Plate Gasket

This gasket is for the D-plate, which prevents fluids from contact with the S-frame. It consists of a ring shaped gasket that seals fluids and a distance piece gasket as a cushion. The material used differs depending on use.



E-Plate Gasket

This gasket is installed on the E-plate, a plate without port holes and which prevents fluids from contact with the E-frame, and acts as a cushion. A plate gasket is installed on the channel side that contacts with fluids, and therefore both an E-plate gasket and an E-distance piece are installed on the E-plate.

Regasket Period

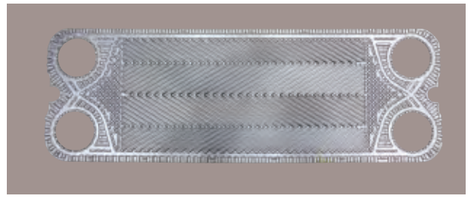
Since PHE gaskets are made of elastic rubber, it is not necessary to replace them every time the plate is disassembled. However, after many years of use they will deteriorate, harden, and lose their elasticity, resulting in a loss of sealing performance. Periodical regasketing is recommended.

Usage Temperature	Gasket Replacement Estimate
Hot water over 100°C	1 to 3 years
Warm water over 30°C and below 100°C	5 to 7 years
Water below 30°C	7 to 10 years

Note: For high-temperature uses such as steam heating and heat exchange uses such as fluids that are strongly corrosive to rubber, life time is shorter than the figures shown in this table.

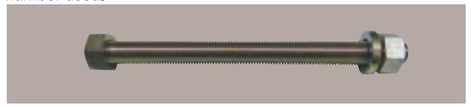
Plates

Plates include a D-plate on the S-frame side and an E-plate on the E-frame side. The material used differs depending on use. As E-plate is only one plate in the unit, the spare plate in stock is recommended.



Tightening Bold and Nut

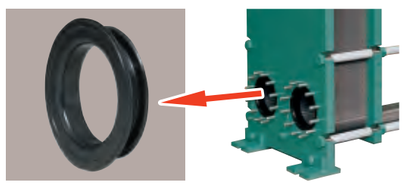
Dimensions might differ depending on PHE model and the number used.



Adhesives

Rubber Boot for Connection

The rubber type only.
Size and material might differ depending on PHE model and use.



Other Service Options

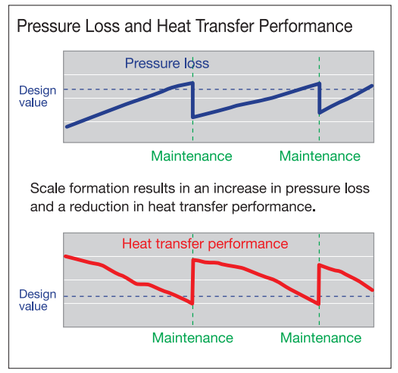
Performance Check Service

Visualization of Diagnosis about Performance

Maintenance, When?

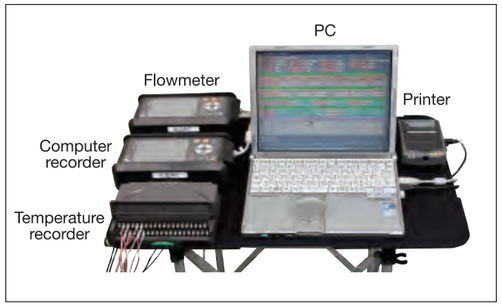
Preventing Loss of Heat Energy and Pump Power

Over long periods of operation, scale gradually forms on the heat transfer surface, eventually resulting in a reduction in heat transfer performance and an increase in a pressure drop. When the heat transfer performance drops below the design values, it can be restored to the original performance by performing maintenance. Decreasing of heat transfer performance and an increase in a pressure drop will lead to a reduction in heating, cooling, and heat recovery, and a loss of heat energy and pump power.



What is a Performance Check Service?

A detector is installed on the piping connected to the PHE to easily and quickly measure the performance of the PHE. Based on the results of this diagnosis, an estimate of the optimal maintenance period is estimated and the performance restored after cleaning is visualized.



Re-Pressing Plates

After long operation of PHEs, strain and deformation can occur in PHEs. HISAKA offers a re-press service for the plates in operation at the site. Through this re-press service, plates can be restored.
(Depending on model and the condition of the plates you are using, the re-press service might not be available. Contact HISAKA in advance for more information.)

Plate dies for re-pressing