# heatexchangerspares.com



One Point of Contact | Every Brand Covered | Extensive Stock Holding

T: +44 (0)1923 232 335

E: mail@heatexchangerspares.com

### **About Us**

Founded in 2000 to supply spare parts and service for all brands of plate heat exchanger (PHE), we are now part of the Ormandy Group. We recognised the majority of sites we visited, had other makes of plate heat exchangers in operation, providing us with an opportunity to offer spare parts and servicing for ALL plate heat exchangers, not just the equipment we had supplied ourselves. This gave our customers the advantage of having just one point of contact.



#### **Parts and Service**

Engineers have 30 years combined experience and travel the UK. We carry out full off-site refurbishment of your plate packs or complete heat exchangers at our workshop.

- Engineers available to remove plate packs and complete PHEs.
- Couriers available to collect plate packs and complete PHEs.
- Chemical clean, crack test and re-gasket of plates (& re-build into frame if required).
- Pressure testing of PHEs.
- Delivery back to site (or engineers can attend site and re-fit).

### **Fast Response Times**

We aim to respond immediately to emails and phone calls, even if initially, just to confirm that we have received the information and advise when we will have a quotation ready. If we have the specification to hand, we can quote by return. Contact us with the model types and serial numbers of your heat exchangers, and we will check the specifications, so we have the information ready for your quotation. Alternatively, if you would like an engineer to survey your heat exchangers, please contact us.

### **ALL Heat Exchangers - One Point of Contact**

#### **Identifying Your Plate Heat Exchangers**

We can usually identify heat exchangers, even if the nameplate has faded or has been removed. Contact us or complete our online enquiry form and we will check our comprehensive records. If we can't identify the equipment from your information, we can arrange for an engineer to come to site to investigate further.

#### **Plate Heat Exchanger Installation**

If access is poor or your PHEs are too big to be installed in one piece, our engineers can flat pack them for ease of transporting and positioning. Following a site survey, the flat packed heat exchanger is positioned in line with the plant room drawing, rebuilt and pressure tested. As the work is undertaken by our engineers, your 12 month warranty is not affected.

#### **Genuine OEM and Non-Genuine Spare Parts**

Some clients prefer to use genuine OEM (Original Equipment Manufacturer) parts only, whilst others prefer the option of non-genuine parts to reduce costs, so we offer both. Our non-genuine parts are carefully sourced, and undergo stringent testing to ensure they are of the highest quality. We are confident in the quality of our non-genuine parts, hence offer the same guarantee against material defect as the OEMs.

### **Fast Delivery from UK stock**

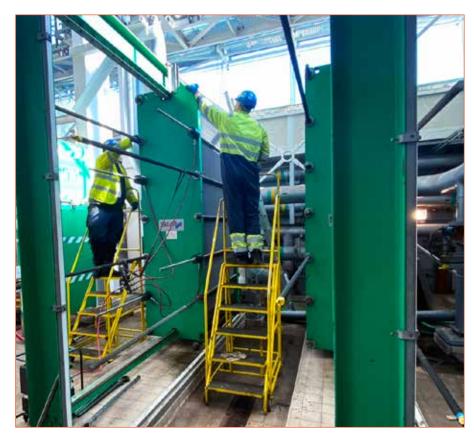
We stock an extensive range of plate heat exchanger spare parts in the UK. If we have the parts in stock, we can usually offer same day delivery. We stock everything from plates and gaskets to frame liners, tightening bolts and carrier bars.

### **Plate Heat Exchanger Specialists**

We recognise that the majority of sites we visit have other makes of plate heat exchangers in operation, providing us with an opportunity to offer spare parts and servicing for ALL plate heat exchangers, especially for facilities maintenance companies and procurement houses.

We specialise only in plate heat exchangers, and by focusing on key areas, we feel we can provide the best possible service to our customers.

### **On Site Servicing**



#### Services include:

- Installation of new equipment
- Fitting new plate packs
- Removal & re-fit of plates for off-site refurbishment
- Pressure testing
- Service contracts and training

Plate heat exchangers are used in a range of industries. We have the expertise at working on a variety of sites including:

- Food Factories
- CHP Plants
- Oil Refineries
- Pharmaceutical Companies
- Water Treatment Works
- Office, Government and Residential Buildings
- Hotels and Health Clubs

Fully trained engineers have over 20 years experience servicing plate heat exchangers and are available to carry out work on all the leading brands of plate heat exchanger throughout the UK, and overseas if required.

### **Competitive Prices, with Minimum Lead Times**

Our engineers carry the CSCS (Construction Skills Certificate Scheme) Skill card which qualifies them to carry out installation and service work for all the leading construction companies. The CSCS card provides evidence that the holder has undergone health and safety awareness training and testing.

### Plate Heat Exchanger Service & Replacement

We offer a complete plate heat exchanger refurbishment program. Our engineers are available to attend site, to open heat exchangers and remove the existing plates and gaskets. We recommend using our rotating plate pack solution with this service.



You can also return the complete plate heat exchanger, to our works for refurbishment. This service will also include a full hydraulic pressure test, complete with test certificate, before the heat exchanger is returned to site.

### **Full Hydraulic Pressure Test Included**

#### **Stage 1: Pre-Clean & Initial Inspection**

When the plates and gaskets arrive back at our works, they are checked against your specifications. After a visual inspection, old gaskets are removed and heat transfer plates are pre-cleaned using a pressure washer.

#### **Stage 2: Chemical Clean**

The heat transfer plates are then dipped in a series of chemical baths to remove deposits and scale. They are then completely rinsed with clean water and visually inspected for a second time.

#### **Stage 3: Dye Penetrant Testing**

The cleaned plates are sprayed with a fluorescent dye and inspected with an ultra violet lamp, for pit corrosion, pin holes and cracks. To reduce servicing costs, we select a random percentage for testing. This allows us to efficiently identify any failure trends before the entire plate pack is tested.

#### **Stage 4: Regasketing**

The heat transfer plates are regasketed with new gaskets and assembled in plate pack order, ready for installation in the heat exchanger frame. Plates may require glued gaskets. During the regasketing process, gaskets are tapped to the plates and stacked, to minimize gasket movement, ready for the next stage.

#### **Stage 5: Oven Cure**

Heat transfer plates with glued gaskets are placed inside a temperature controlled oven for a specific time period. The curing is an important stage, as it eliminates gasket movement during final assembly.

#### **Stage 6: Final Assembly**

The heat transfer plates will be installed in the plate heat exchanger frame.

This work is completed by trained service engineers, as each plate heat exchanger has a specific heat transfer plate arrangement.

A full hydraulic pressure test will be carried out on all plate heat exchangers which have been serviced at our works.

### **Service Contracts**

The performance of heat exchanger equipment will steadily reduce from the first time it's used. To maintain your water temperature, you will have to adjust flow rates and boiler or chiller temperatures. This in turn will increase time, effort and more importantly, costs.



#### **Competitive Prices**

We have access to a global supply chain which enables us to identify your heat exchangers and source competitive parts, while still maintaining the highest quality

#### **Equipment Covered**

Plate Heat Exchangers - Hygienic
Plate Heat Exchangers - Industrial
Hot Water Sets
Aquasave
Aquasave BIO
Aquamodule / Cetemodule
Reduced Risk

With a Heatexchangerspares.com service contract, you can be safe in the knowledge that your essential heat exchange equipment will be fully functional. Regular inspections enable us to identify any reduction in performance or mechanical problems early, reducing their impact and the likelihood of a breakdown occurring.

# **Early Problem Identification Reduces or Eliminates the Impact**

During the annual contract period, you will receive a minimum of two visits. These can be either scheduled or used as an emergency visit. You will also benefit from discount on spare parts.

After each visit, you receive a detailed service report on the condition of the equipment. This allows us to accurately tailor the maintenance programme to your requirements.

### **Technical & Sales Support**

If you have any questions related to your plate heat exchangers, whether it be an urgent requirement or just a general question, please do not hesitate to contact us and one of our experienced sales team or service engineers will be available to assist you.

### **Rotating Plate Packs**

If your heat exchanger is part of a critical application or if downtime for servicing must be kept to an absolute minimum, we would recommend a rotating plate pack. This would minimise downtime, reduce risk, provide damage limitation and prolong the life of the Heat Exchanger



#### **Reduced Risk**

In critical applications, unexpected heat exchanger failures can cost thousands of pounds for every day the heat exchanger is not running.

Adopting the rotating plate pack system means you have a spare plate pack ready to install, in the event that a heat exchanger fails unexpectedly.

This can be vital, especially as the lead time for spare parts can be several weeks for some heat exchangers, particularly obsolete models.

### **Damage Limitation**

The normal plate cleaning process downtime may be kept to 1 week, assuming all the plates pass the dye penetrant test, but what happens if some of the plates fail?

If new plates are not available from stock, your downtime can suddenly change from 1 week to several weeks, with dramatic consequences. Having a rotating pack, gives you precious time to replace any plates that have failed, whilst keeping your heat exchanger in operation.

### Minimised Downtime from 1-3 Weeks to 1-3 hours!

### **Prolonged Heat Exchanger Life**

Regularly refurbishing your heat exchanger plates will prolong their life in the long run.

Deposits and scale left in a heat exchanger for long periods of time may damage the heat transfer plates, often rendering them useless, even after the first service. Regular preventative maintenance will ensure consistently high efficiency and maximum heat exchanger life.

#### **Minimise Downtime**

When the heat exchanger is first serviced, the existing plate pack is removed and replaced with a new set of plates and gaskets. This minimises downtime to 1 - 3 hours, as no cleaning or regasketing is required.

The old plate pack is removed to be cleaned, regasketed and held ready for the next service. When the heat exchanger is next serviced, the process is repeated. The existing plate pack is removed and replaced with the refurbished plate pack. Once again, downtime is kept to just a few hours rather than the 1 - 2 weeks that would normally be required to refurbish the plates.

This method of plate pack rotation is particular cost effective if you have several heat exchangers on site that have identical plate packs, as just one rotating plate pack can be used to service many heat exchangers.

### **Genuine OEM and Non-Genuine Spare Parts**

We realise some of our clients prefer to use genuine OEM (Original Equipment Manufacturer) parts only, whilst others prefer to have the option of non-genuine parts to reduce costs, so we offer both options. Our non-genuine parts are sourced very carefully and undergo stringent testing to ensure they are of the highest quality.

We are very confident in the quality of our non-genuine parts and therefore offer the same guarantee against material defects as the OEMs.

We are very aware of suppliers from around the world offering 'quality copy spare parts', that when put to the test simply do not perform to a satisfactory standard. Using such parts is not a cost effective long term solution.



# **Equipment Covered**Major components include:

- Gasketed or Brazed Heat Exchangers
- Control Panels
- Controllers
- PCB's,
- Primary and Secondary Pumps
- Control Valves
- Actuators
- Temperature Sensors
- Pressure Relief Valves
- Any other Ancillary Parts.

### **Fast Delivery Times from UK Stock**

By sourcing the parts through our global supply chain, we can keep prices competitive and lead times to a minimum.

We stock an extensive range of plate heat exchanger spare parts in the UK, to enable us to offer the fastest possible delivery times. If we have the parts in stock, we can offer same day delivery to most parts of the country. We stock everything from plates and gaskets, to frame liners, tightening bolts and carrier bars. Typical Manufacturers include Alfa Laval, Atlantic 2000, Cetetherm, Cipriani & CIAT, Spirax Sarco and Stokvis.

### We Can Identify ANY Type of PHE Fitted For You

Hot water packages are found wherever domestic hot water is required e.g. Hotels, Leisure Centres, Hospitals and offices and vary from one manufacturer to the next. There are many different manufacturers of these packages and it is not always clear which model of PHE has been fitted.

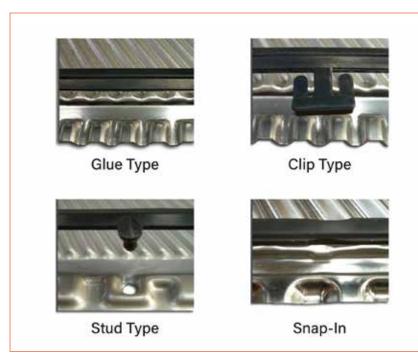
Heat Exchanger Spares.com can identify the type of PHE fitted for you, and provide a quotation for any spare parts and servicing required.

### **Plate Heat Exchanger Gaskets**

Heat Exchanger Spares.com supply replacement heat exchanger gaskets for ALL plate heat exchangers.

All plate heat exchanger gaskets are manufactured in accordance with a rigorous quality control procedure. With our gasket testing facilities, we are able to fully inspect gaskets to ensure they continuously meet our high standards. For this reason, we are able to offer a 12 month warranty (subject to conditions) on all plate heat exchanger gaskets supplied by us.

Depending on the heat exchanger manufacturer and model type, the heat exchanger gaskets are fixed to the heat transfer plates either mechanically or with an adhesive.



#### **Adhesive Attachments**

**Pros.** The gaskets can be easily removed and replaced, as the gasket sealing area remains clean (free from glue residue).

Cons. The gaskets will become detached from the heat transfer plates when pressure washing on site or through incorrect/rough handling. Care must be taken when tightening.

#### **Mechanical Attachments**

**Pros.** Gaskets remain attached to the plates when being cleaned on site, i.e. using a high pressure washer.

**Cons.** When replacing gaskets, heat transfer plates require off site servicing to ensure, gasket grooves are clean and new gaskets are bonded correctly.

### 12 Month Warranty On ALL Gaskets Supplied By Us

### **Gasket Selection Guide**

GASKET MATERIAL	TYPICAL RANGE	TYPICAL APPLICATIONS
NBR	-15°C to 110°C	Cooling / LTHW / Oils
NBR HT	-10°C to 135°C	Cooling / LT Hot water / Oils
HYDROGENATED NBR	-10°C to 160°C	HT Hot water / Oils
EPDM	-25°C to 150°C	HT Hot water
EPDM HT	-10°C to 160°C	HT Hot water
BUTYL	-10°C to 160°C	HT Oils & Solvents
HYPALON	-10°C to 70°C	Specialised Chemicals
VITON <sup>®</sup> (FKM) A/B/G	-5°C to 130°C	HT Oils & Chemicals
NEOPRENE	-10°C to 80°C	Specialised Chemicals

On the left, is a list of available gasket materials and their respective applications.

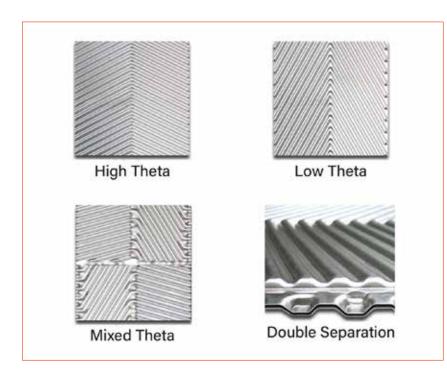
Certain gasket materials are limited to specific plate heat exchanger ranges and model types.

Please check availability before ordering.

### **Plate Heat Exchanger Plates**

By utilising our global supply chain, we are able to supply genuine heat transfer plates for all types of plate heat exchanger. Combined with the holding of extensive stocks, this enables us to keep prices competitive and keep lead times to a minimum. Non-genuine plates are also available for some models if required.

A plate heat exchanger is designed to give the best thermal efficiency, with a specific combination of high and low theta heat transfer plates. To maintain the correct duty, it is important that the same type of plates are used and installed in the correct order. Each plate heat exchanger is supplied with a plate configuration sheet, which contains all the relevant information for ordering spare parts and rebuilding the plate pack.



# Heat Transfer Plate Arrangement

Every plate heat exchanger is different, so to maintain the correct duty, it is important that the same theta plates are used and are installed in the correct order.

Each is supplied with a plate configuration sheet, containing the relevant information for ordering spare parts and rebuilding the plate pack.

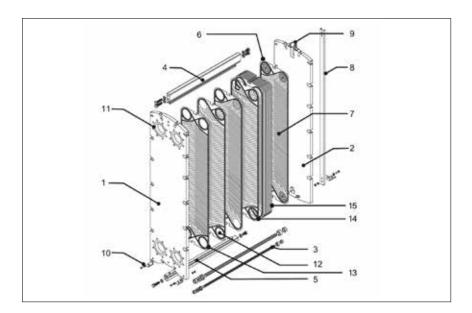
Before being returned to the customer, every heat exchanger plate pack we service, is arranged in the correct order, ready for installation by on-site engineers.

### **Competitive Prices, with Minimum Lead Times**

Heat transfer plates are available in different materials and thicknesses, depending on the manufacturer.

### **Plate Heat Exchanger Components**

During the service life of a plate heat exchanger you will be regularly changing the gaskets and cleaning the heat transfer plates.



However, there may be times when other items become damaged, especially if the plate heat exchanger is installed in an aggressive environment or used in conjunction with corrosive liquids.

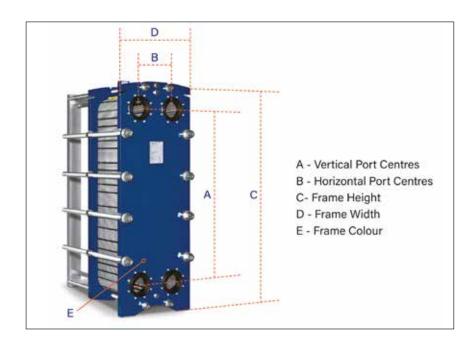
Item No	Description
1	Fixed Frame Plate
2	Mobile Pressure Plate
3	Tightening Bolts /Tie Bars
4	Top Guiding / Carrier Bar
5	Bottom Guiding /Carrier Bar

Item No	Description
6	Back Plate
7	Plates and Gaskets
8	Column / Back Leg
9	Pressure Plate Roller
10	Feet

Item No	Description
11	Liners
12	Porthole
13	Front Plate & Full 'D' Gasket
14	Flow Gaskets
15	Flow Plates

### **Plate Heat Exchanger Identification**

Most plate heat exchangers have a name plate label which states its make and model. Unfortunately this label can be damaged or removed, making identification very difficult.



## Information Required for Correct Identification

By using our knowledge of plate heat exchangers we are able to identify most model types using the dimensional information as shown.











