

HFM PLATE HEAT EXCHANGER

Global Heat Exchanger
Manufacturer and Supplier

Hearing Focusing Making

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Hofmann (Beijing) Engineering Technology Co., Ltd. (HFM), founded in the 1990s, has been a stalwart in the heat exchange industry for over three decades. HFM is dedicated to staying at the forefront of technological advancements while embracing innovative solutions. By integrating heat exchanger technologies with internet capabilities, HFM has emerged as a global leader in the heat exchange sector, renowned for its innovative global supply chain, advanced production capacity, and exceptional thermal technology services.

With extensive experience in the heat exchange industry, HFM possesses strong capabilities in industrial solutions and complex technical processes. We offer a comprehensive range of services, including fluid handling, catering to over 20 different heat exchange-related applications.

Leveraging the manufacturing advantages of "Made in China," HFM has established a global industrial cross-border e-commerce

platform. This platform provides a one-stop heat exchange equipment supply service to over 110 countries and regions, integrating manufacturing, technology, and marketing worldwide.

At HFM, embracing new technologies and staying current with industry advancements is a fundamental principle. We lead the way in adopting international technologies in the traditional heat exchange field, innovatively integrating heat exchange with big data. By utilizing scientific and intelligent data, HFM optimizes product design and service processes, delivering customized services to clients.

HFM is more than a traditional manufacturing company; we are pioneers in modern energy-technology solutions, aligning seamlessly with current industry demands.

HFM:

Keeping pace with the era.



Our Mission

Provide one-stop heat exchange solutions to meet the needs of global users in the field of heat exchange.



Our Vision

Determined to lead the innovation of the global heat exchange industry, broaden the boundary of the heat exchange market, empower traditional manufacturing with digital technology, to become the global authority in the field of plate heat exchange, and commit to the sustainable development of green ecology.



Our Value

At HFM, we're more than just a heat exchange solution provider; we're innovators, strategists, and partners in your success. Our commitment to innovation, intelligent operations, and exceptional customer experience sets us apart, ensuring tailored solutions and unparalleled service for every client.

Maintain Innovation

Keep pace with the era, constantly explore the latest technical fields, and try to combine them with heat exchange technology. With tools such as AI and big data, heat transfer solutions are custom-designed to each customer, ensuring the perfect match between demand and performance.

Intelligent Operation

Through the data management system, real-time analysis of market data, optimize productivity and inventory management, and improve operational efficiency.

Customer Experience

Committed to improving customer experience, through instant technical support and online response services, to provide global customers with one-stop quality service.



History of HFM

1998

How We Began

As the predecessor of HFM, Greenleading was established to promote plate heat exchanger (PHE) business in China, focusing on the R&D and application of plate heat exchanger products.



2001

Continuous Growth

Greenleading was authorized by Germany GEA as its China assembly factory and was leading for three years in sales market share in the power energy industry.



2009

One Giant Leap

BOEN & HFM was registered and established based on the technical design capability and experience in various industries.



2013

Globalization

HFM started its overseas market 2B and 2C development based on e-commerce business, provided plate heat exchangers and full-brand spare parts services, and established a global marketing and service network.



2023

Towards a Brighter Future

HFM is blueprinted as a one-stop plate heat exchanger company with strong potential to connect more deeply, either on products or the industry database.

Product

Gasketed Plate Heat Exchanger (GPHE)



The Gasketed Plate Heat Exchanger (GPHE) represents a cutting-edge solution for efficient heat transfer, featuring a design composed of corrugated metal plates and precision-engineered gaskets. These gaskets ensure that hot and cold fluids remain segregated within separate channels, thereby optimizing heat transfer efficiency while preventing any cross-contamination. This innovative design makes them highly adaptable and compact, ideally suited for applications across diverse industries including power generation, refrigeration, food processing, and chemical processing. HFM's Gasketed Plate Heat Exchangers are distinguished by their superior efficiency, facilitated by the expansive surface area provided by the corrugated plates, which significantly enhances heat transfer performance compared to conventional methods.

Basic Parameters of Gasketed Plate Heat Exchanger (GPHE)

Plate Material:
304/304L, 316/316L, 317, 904L,
254SMO, Titanium, Hastelloy C-276,
Nickel and other available

Gasket Material:
EPDM, NBR, HNBR, Viton, other available
Max Design Pressure: 30barg
Max Design Temperature: 200°C

Semi-Welded Plate Heat Exchanger

The Semi-Welded Plate Heat Exchanger combines robust construction with efficient heat transfer capabilities. Featuring plates welded on one side and sealed with gaskets on the other, this design ensures durability and reliability under high-pressure and high-temperature conditions. Each plate pair is laser-welded to create a sealed channel for corrosive media, minimizing leakage risks effectively.

HFM's Semi-Welded Plate Heat Exchangers are designed for versatility and durability, offering exceptional thermal performance and the ability to handle aggressive and hazardous fluids. Industries such as chemical processing, petrochemical, and oil and gas benefit from the advanced design and reliable operation of these exchangers, ensuring optimal performance and safety in critical processes.

Basic Parameters of Semi-Welded Plate Heat Exchanger

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Gasket Material:
EPDM, NBR, HNBR, Viton, CR, other available
Max Design Pressure: 30barg
Max Design Temperature: 200°C





Stainless-Steel Plate Heat Exchanger

The Stainless-Steel Plate Heat Exchanger (PHE) is a gasketed plate heat exchanger, designed with stainless steel plates and frame, ensuring superior durability and resistance to corrosion. Specifically designed for food-grade applications and industries requiring high-level hygiene, it is ideal for sectors such as food and beverage, pharmaceuticals, and biotechnology. The gaskets, made from food-grade elastomeric materials, ensure a tight seal while allowing for easy maintenance and cleaning, ensuring optimal performance and longevity in hygienic conditions.

HFM's Stainless-Steel Plate Heat Exchangers meet stringent operational demands, offering robust performance and exceptional hygiene standards. These exchangers provide reliable and efficient heat transfer solutions, ensuring process integrity and safety in environments where cleanliness and product purity are critical.

Basic Parameters of Stainless-Steel Plate Heat Exchanger

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Frame Material:
Solid stainless steel or carbon steel clad stainless steel

Gasket Material:
EPDM, NBR, HNBR, Viton, other available
Max Design Pressure: 30 barg
Max Design Temperature: 200°C

Brazed Plate Heat Exchanger (BPHE)

A Brazed Plate Heat Exchanger (BPHE) is an efficient, compact, and versatile heat exchanger designed for transferring heat between two fluids, which can be either liquids or gases. It consists of a series of thin, corrugated metal plates stacked and brazed together using a copper or nickel alloy in a vacuum furnace, creating thin rectangular channels through which heat exchange occurs. This brazed construction eliminates the need for gaskets and enhances resistance to high pressures and temperatures, providing excellent heat transfer capabilities in a compact design.

Due to their smaller size compared to traditional Gasketed Plate Heat Exchangers, Brazed Plate Heat Exchangers are ideal for applications where space is limited. They can function as condensers, evaporators, oil or gas coolers, and perform other roles involving heating or cooling transfer. They are widely used in HVAC systems, refrigeration, industrial processes, electric vehicles (EVs), and renewable energy systems, offering reliability, superior performance, and seamless integration into various systems.

Basic Parameters of Brazed Plate Heat Exchanger (BPHE)

Plate Material:
316/316L
Brazing Material:
Copper, Stainless steel, Nickel

Max Design Pressure: 45 barg
Max Design Temperature: -196°C ~ 225°C



Plate Evaporator



The Plate Evaporator consists of a series of thin metal plates with channels or passages between them through which the liquid to be evaporated flows. Designed to revolutionize liquid evaporation processes, it offers durability, precision, and leak-proof performance. Utilizing semi-welding technology, it efficiently evaporates liquids, making it ideal for industries such as food, beverage, pharmaceuticals, and chemicals.

The evaporator is constructed from corrosion-resistant materials, including stainless steel, titanium, and nickel alloys. These materials are arranged to create a series of parallel channels, ensuring high thermal efficiency and significant energy savings, surpassing the performance of traditional shell-and-tube evaporators.

Basic Parameters of Plate Evaporator

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Gasket Material:
EPDM, NBR, HNBR, Viton, other available
Max Design Pressure: 6barg
Max Design Temperature: 200°C

Plate Condenser

The Plate Condenser is integral to vacuum evaporation and distillation systems, enhancing heat exchange through precision engineering and semi-welding technology. Comprising specialized plate packs and gaskets, it efficiently condenses steam while the cooling medium warms in a gasketed channel.

Constructed from corrosion-resistant materials, including stainless steel, titanium, and nickel alloys, the condenser features a design that ensures low-pressure drop and high turbulence. Ideal for the food and beverage, pharmaceutical, and chemical industries, this condenser provides exceptional efficiency, cost-effectiveness, and ease of maintenance.

Basic Parameters of Plate Condenser

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Gasket Material:
EPDM, NBR, HNBR, Viton, other available
Max Design Pressure: 6barg
Max Design Temperature: 200°C



Welded Plate Heat Exchanger (WPHE)

The Welded Plate Heat Exchanger comprises corrugated metal plates welded together using laser or argon arc welding, forming a series of channels for efficient heat transfer. Without gaskets, welded plate heat exchangers offer superior resistance to high temperatures and pressures, making them ideal for extreme conditions. Constructed from materials such as stainless steel and titanium, they provide high thermal efficiency and are less prone to leakage and fouling.

Welded plate heat exchangers are widely used in industries such as petrochemical, oil and gas, energy power, biomedical, and metallurgy. Variants include non-detachable, two-sided, four-sided detachable (HFM bloc), and wide-channel welded plate heat exchangers, catering to diverse industrial requirements and ensuring robust performance in demanding environments.



Basic Parameters of Welded Plate Heat Exchanger (WPHE)

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Max Design Pressure: 40barg
Max Design Temperature: 400°C

HFM Bloc

The HFM Bloc is a four-sided detachable fully welded plate heat exchanger designed to provide a compact solution for high-pressure and extreme-temperature applications. Unlike traditional welded plate heat exchangers, it features no gaskets and is accessible on both sides, making it significantly easier to clean. This design allows for closer temperature approaches and requires minimal space, enhancing overall efficiency.

These exchangers are low-maintenance, fully robot-welded, and cost-effective. Available in materials such as SS316L, titanium, Hastelloy, 254 SMO, 904L, and nickel, the HFM Bloc is suitable for various demanding environments. It ensures reliable performance in challenging conditions, making it an ideal choice for industries that require robust and efficient heat exchange solutions.

Basic Parameters of HFM Bloc

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Max Design Pressure: 50barg
Max Design Temperature: 400°C



Plate and Shell Heat Exchanger (PSHE)

The Plate and Shell Heat Exchanger combines the benefits of plate heat exchangers and shell-and-tube heat exchangers. It features corrugated plates welded into a cylindrical shell, with the plates typically made of stainless steel. This design creates high turbulence and efficient heat transfer. Fluid A flows through the channels formed by the plates, while Fluid B flows through the surrounding shell, often in opposite directions, to maximize heat transfer.

This heat exchanger is available in bolted configurations with removable plates for easy maintenance, as well as fully welded models for robust, gasket-free construction. The Plate and Shell Heat Exchanger is well-suited for a wide range of industries, including HVAC, marine, oil and gas, petrochemical, energy power, biomedicine, and food and beverage.



Basic Parameters of Plate and Shell Heat Exchanger (PSHE)

Plate Material:
304/304L, 316/316L, 254SMO,
Titanium, Hastelloy C-276,
Nickel and other available

Max Design Pressure: 100 barg
Max Design Temperature: 500 °C



Quality Control

At HFM, our quality control process is integral to our dedication to excellence in the heat exchange industry. We enforce strict quality assurance protocols at every stage of production, from selecting raw materials to the final inspection of completed products. Our modern laboratories are equipped with advanced testing equipment, allowing precise analysis and validation of material properties. Each component undergoes thorough examination, including Positive Material Identification (PMI), checks on plate corrugation depth, gasket thickness, and pressure testing, ensuring that every product meets or exceeds industry standards.



Measuring and inspecting gasket thickness



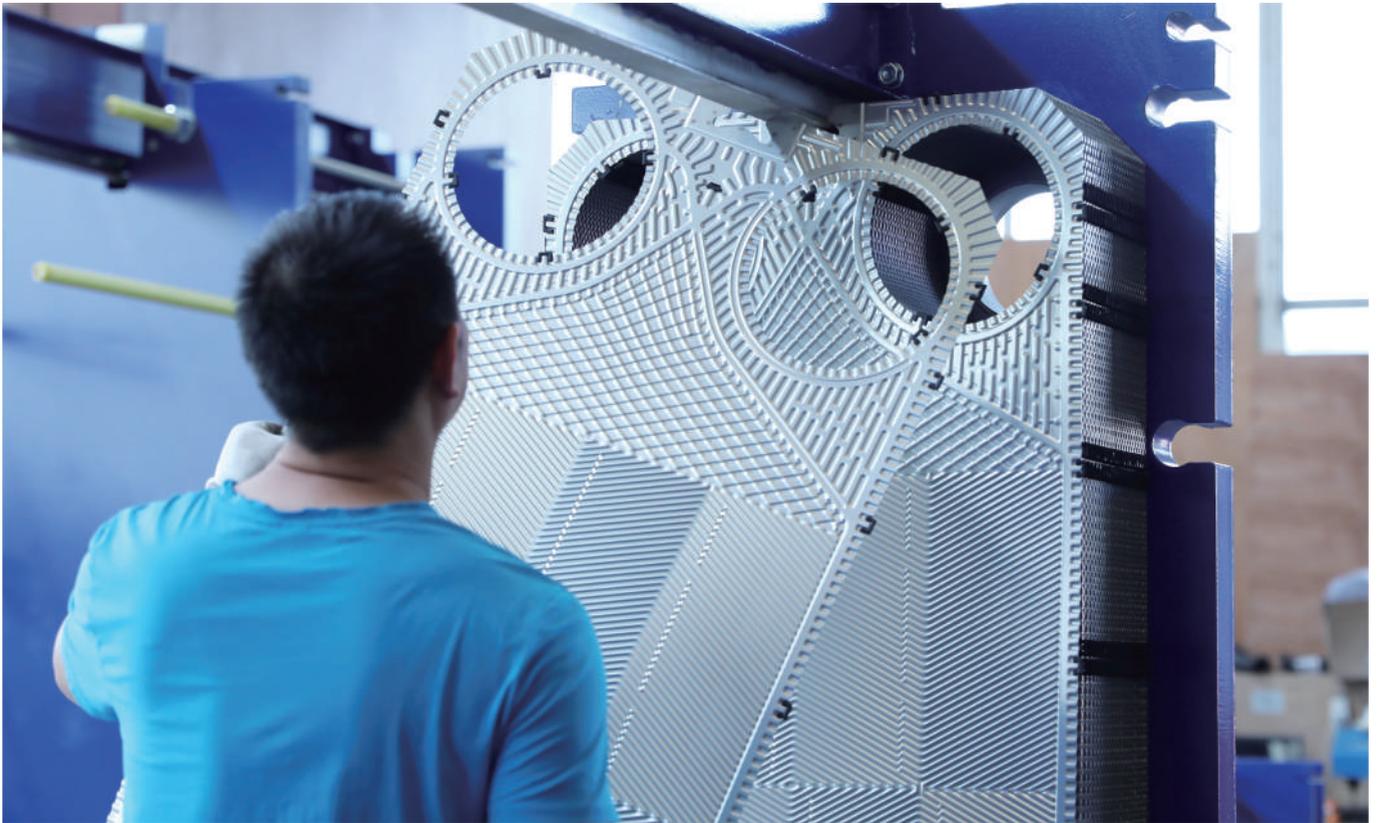
Measuring and quality control of corrugation depth in a plate



Positive Material Identification (PMI) on plate



Penetration testing on plate



Assembling process of a Plate Heat Exchanger



Inspecting and adjusting the tightening dimensions of a Plate Heat Exchanger



Pressure testing procedure of a plate heat exchanger

Our dedicated team of quality control experts continuously monitors the manufacturing process, conducting real-time inspections and audits to maintain the highest standards of accuracy and reliability. We adhere to strict international certifications and standards, reflecting our commitment to quality and customer satisfaction. Through continuous improvement initiatives and employee training programs, we ensure that our processes remain at the cutting edge of technological advancements, delivering exceptional quality in every heat exchanger we produce.



Solutions

HFM custom design solutions for plate heat exchangers and fluid handling equipment, helping the industries to achieve better heat transfer and energy saving.

High-speed turbulence flow plate channel design and even flow distribution area

make the high efficient heat transfer of plate heat exchangers. The compact-structure construction, good quality alloy-made plate packs and rubber sealings ease the maintenance and installation and prolong the life cycle of plate heat exchangers.

**Find out more about
HFM choices for the following
application processings.**





Metallurgy



Marine



Oil and Gas



Power Plant



Petrochemicals



Wastewater Treatment



Fuel Cells



Data Center Cooling



Ethanol Processing



HVAC



Fertilizers



Pharmaceutical Production



Sugar Production



Dairy Processing



Wine and Distilled Alcoholic Beverages Production



Beverage Processing



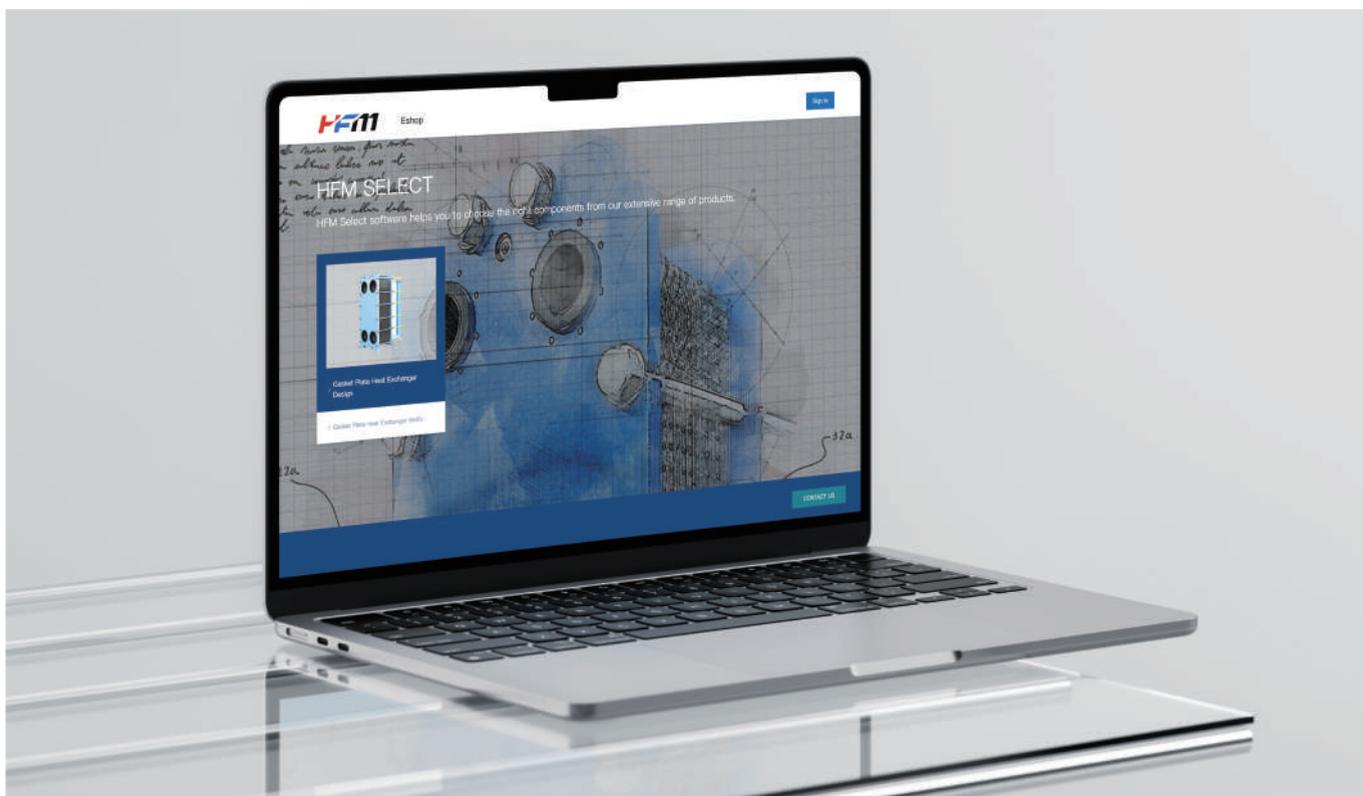
Yeast Production



Pulp & Paper

E-Shop

Introducing the HFM E-Shop, your premier online destination for high-quality plate heat exchangers, their plates and gasket spare parts, and HFM-related souvenirs. The HFM E-Shop offers a comprehensive range of products designed to meet the diverse needs of industries worldwide. With its user-friendly interface, you can easily browse and select from our extensive inventory. Our platform provides a seamless and efficient shopping experience, featuring secure payment options, fast shipping, and dedicated customer support. Discover the convenience of finding everything you need in one place and enjoy the assurance of reliable, high-quality products from HFM.



HFM Select

For the convenience of our customers in selecting the perfect plate heat exchanger, HFM has introduced the Selector Tool-HFM Select. It is designed to enhance the selection process, helping you identify the ideal plate heat exchanger solution in just a few clicks. Experience a range of customi-

zation options, allowing you to fine-tune parameters and explore various configurations to meet your exact needs. Our selector tool not only simplifies the selection process, but also saves valuable time and resources, enabling you to focus on what matters most - driving your business forward.

Who Admits Us?

Devoted to becoming a global plate heat exchanger supplier recognized for excellence, HFM places utmost importance on attaining international quality certifications. We uphold stringent control measures throughout our production procedures, to guarantee that our customers receive nothing short of the best-quality products.

We are resolute in our commitment to consistently meet and exceed industry standards. Our diverse range of certifications, including 3A, ISO, CE, BV, SGS, and others, further validate our unwavering dedication to quality.



﴿ ISO 9001 / 14001 / 45001 ﴾ ﴿ PED / BV / 3A / ASME / CE / CUTR ﴾

Who Trusts Us?

We have gained the trust of our clients all around the world. By providing high-quality products and services to users in various industries on a consistent basis, HFM Plate Heat Exchanger is known as a reliable partner for cooperation.





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