

*A Key Player committed to
Energy Transition & Transformation*

NG0-GNRL01ENG-revN



Nexson Group is a French company based in Garchizy in the Nièvre region. Aware of environmental issues, our company helps manufacturers optimize their manufacturing processes by saving energy. Every day, Nexson does more to preserve our natural resources. We offer our customers concrete solutions to reduce energy consumption, which also has a positive impact on the environment.

80+
COUNTRY COVERAGE

700+
CUSTOMERS IN THE WORLD

4
PRODUCTION SITES

30+
YEARS
EXPERIENCE

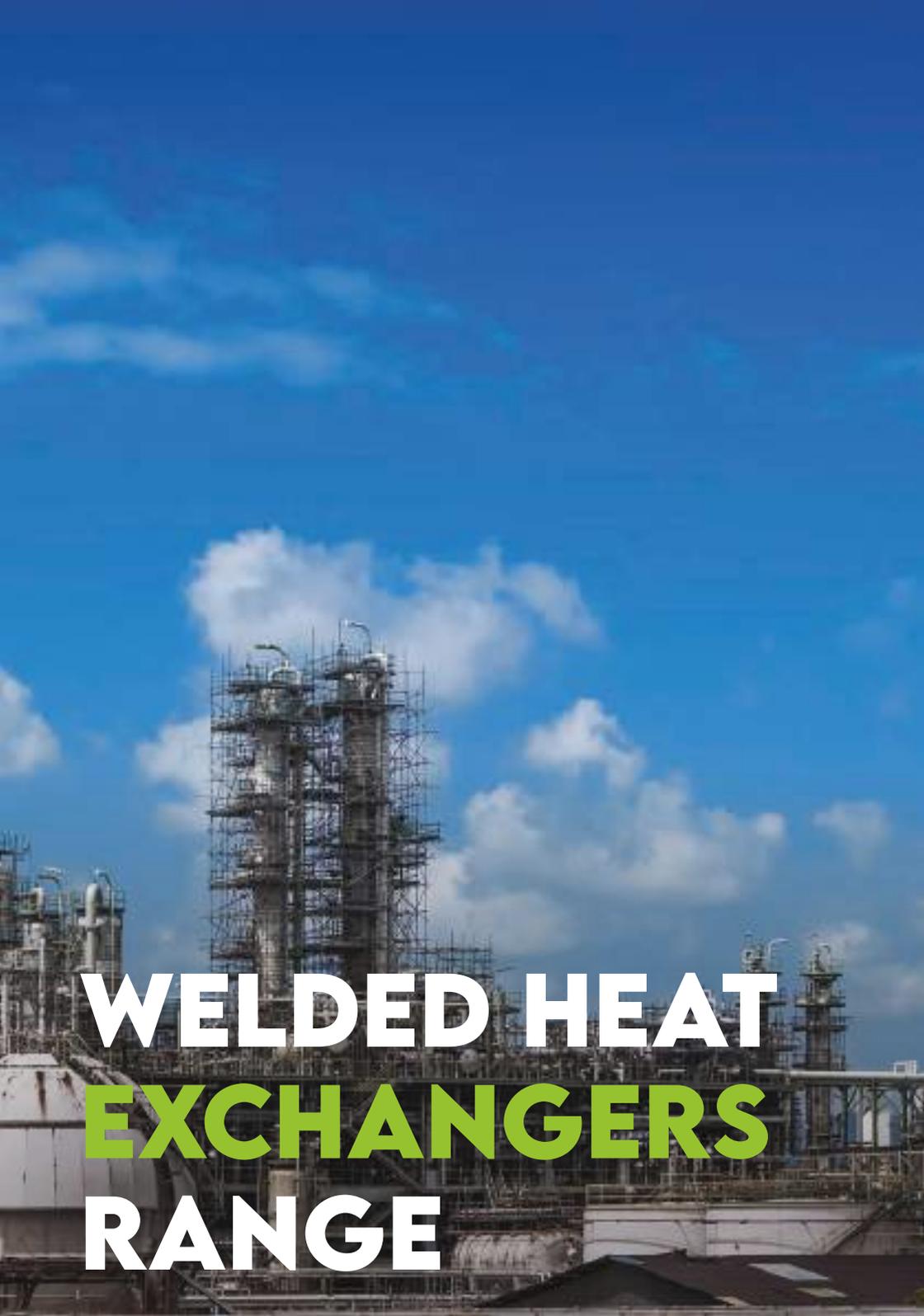
Reliable quality, specialized skills and performance for key components.

Sustainable Growth Driven by Innovation and Performance

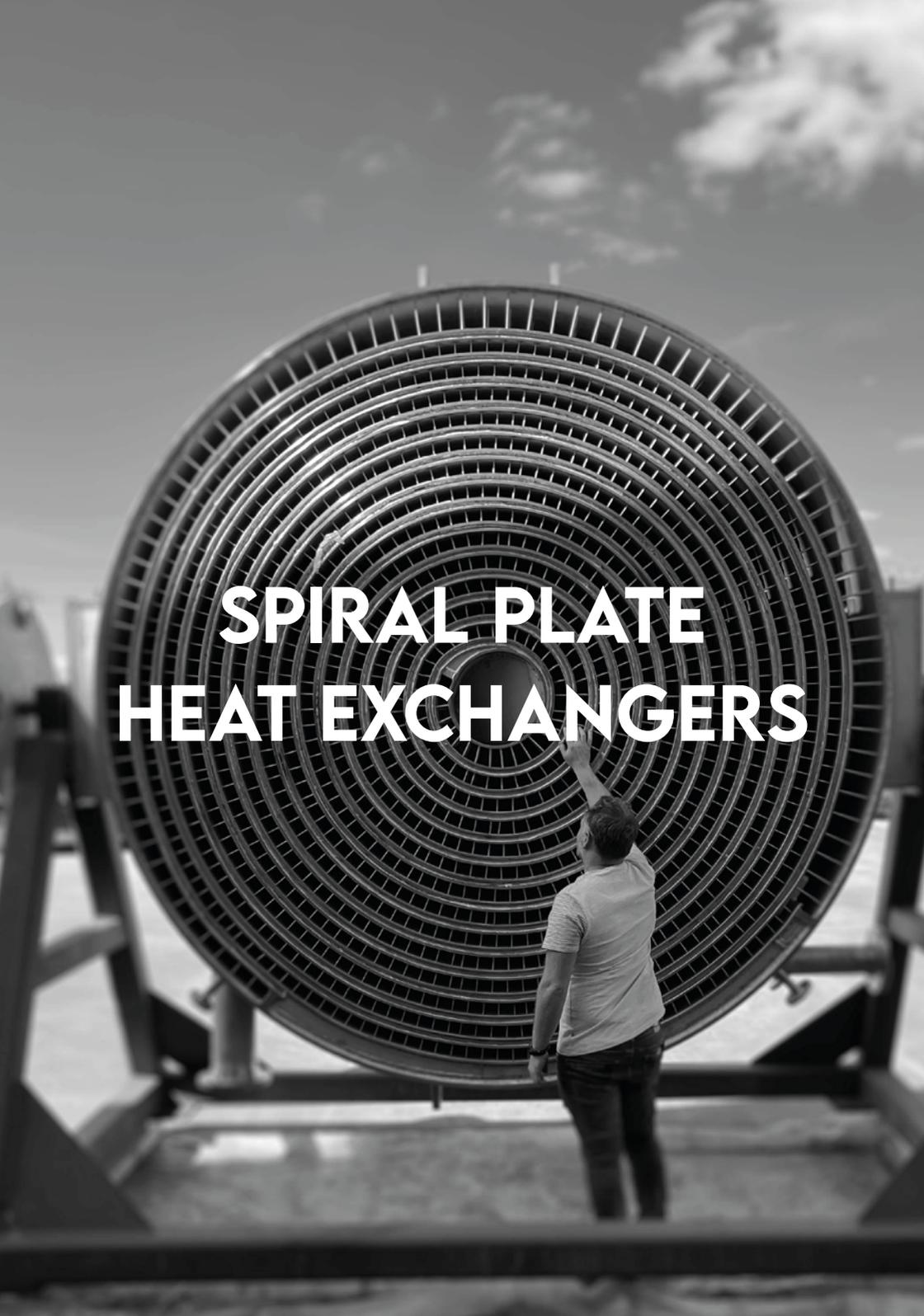
For more than ten years, the Group has developed mainly through endogenous growth, based on technological innovation, industrial performance and a customer-focused approach to service quality. This dynamic approach has enabled Nexson Group to establish itself as a key player in the field of heat transfer process components on a global scale.

Multidisciplinary Solutions for a Wide Range of Industries

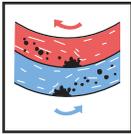
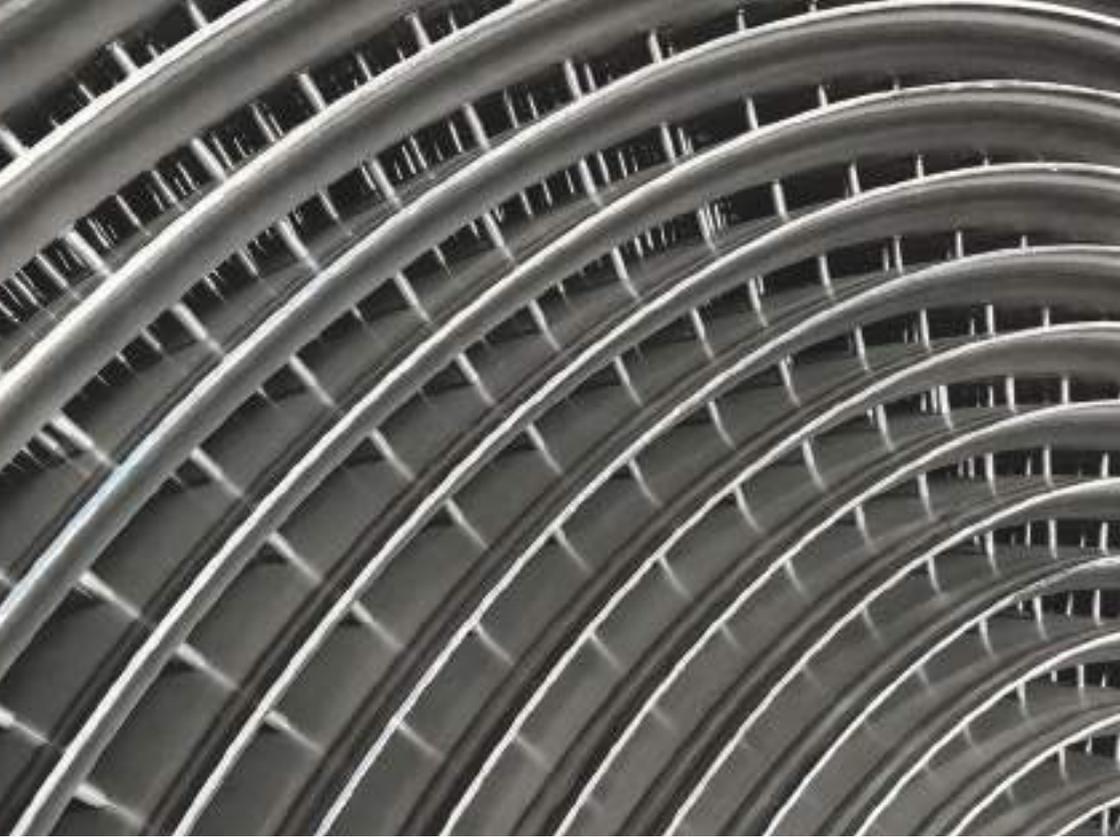
Today, Nexson Group is structured around several complementary areas of activity, with the ambition of offering a complete and coherent range of tailor-made industrial solutions. These solutions are aimed at a wide range of industrial sectors, both in France and internationally, particularly in the chemical, petrochemical, agri-food, energy and other sectors. Thanks to its multidisciplinary expertise, the group is able to support its customers in their most complex projects, providing them with innovative, sustainable and high-performance solutions.

A photograph of an industrial refinery or chemical plant. The scene is dominated by a large, complex structure of metal pipes, scaffolding, and towers, likely a distillation column, which is the central focus. The structure is set against a bright blue sky with scattered white clouds. In the foreground, there are various industrial components like tanks and pipes, partially obscured by the large text overlay. The overall atmosphere is industrial and clear.

**WELDED HEAT
EXCHANGERS
RANGE**

A black and white photograph of a large, circular spiral plate heat exchanger. The device is composed of many concentric, overlapping metal plates, creating a complex, grid-like pattern. A person in a light-colored shirt and dark pants stands in the foreground, looking up at the heat exchanger, providing a sense of scale. The background shows a cloudy sky.

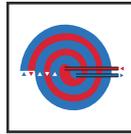
SPIRAL PLATE HEAT EXCHANGERS



SELF-CLEANING



EASY FOR INSPECTION
AND CLEANING



SINGLE CHANNEL



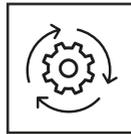
HIGH PRESSURES
& TEMPERATURES



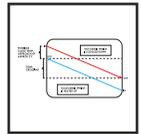
HANDLE CORROSIVE/
EROSIVE FOULING MEDIA



LOW MAINTENANCE
COSTS



LOW OPERATING
COSTS



ENERGY SAVING

Spiral Plate Heat Exchangers - Liquid to liquid duties

GreenSpiral™ Type 1 LOW PRESSURES

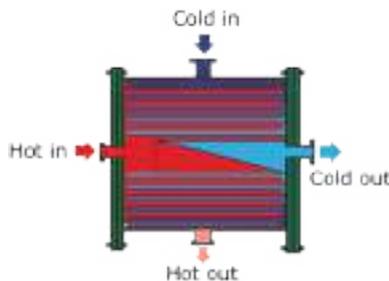


GreenSpiral™ versatile design allows it to handle one or two fouling fluids. Our customized, fit for purpose approach, optimizes the channel spacing vs particle size, and the pressure drop across each channel. The single passage channels facilitate turbulent flows to handle fouling medias and have a self-cleaning effect. Both channels are easy to access for inspection and cleaning. Your alternative to the shell and tube heat exchangers.

GreenSpiral™ Type 1 HIGH PRESSURES



Nexson GreenSpiral™ can handle cycling duties. The robust design allows our heat exchangers to expand without mechanical failures during a pressure or temperature fluctuation. The uniform, precise engineered thermal spiral core design, defined cross section that is combined with turbulent flows, allows the GreenSpiral™ heat exchanger technology to have no dead zones in the channels, maximizing the heat transfer surface. This SPHE model is specifically designed to handle high pressures for tough applications.



Spiral Plate Heat Exchangers - Biphasic applications

GreenSpiral™ Type 2



Nexson GreenSpiral™ Type 2 heat exchanger is ideal to handle biphasic applications where condensing is required for vapors, with or without inert gases, evaporation of large flows and when low pressure drop is required, such as near vacuum applications. In evaporator or condenser mode, our SPHE offers easy access for inspections and/or mechanical cleaning on the two sides open vertical vapor media side, while the other (clean) media side is fully welded and thus is not mechanically accessible.

GreenSpiral™ Type 2 Column



The GreenSpiral™ Type 2 column heat exchanger unique design features can be used for condensing and boiling duties between two gases or a liquid to gas system. Nexson Group's precise engineering capabilities and fit for purpose individual approach design allow us to build the GreenSpiral™ Type 2 column with several spiral heat exchangers welded in series, in the same shell to achieve large condensing duties with reduced footprint.

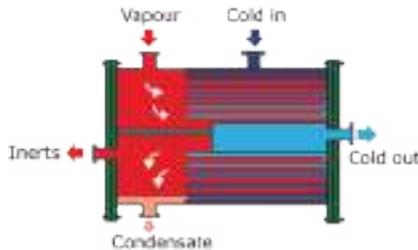


Spiral Plate Heat Exchangers

GreenSpiral™ Type 3 STEAM HEATER



GreenSpiral™ Type 3 plate heat exchanger is commonly used to heat a fouling, viscous, tough fluid medias by using steam. The steam circulates in a crossflow manner in a both sided fully opened channel, through the complete width of the unit and thus creating the least amount of pressure drop. If present, our design can allow inert gases to be removed easily. The liquid media circulates in a closed spiral channel where the selfcleaning effect mitigates fouling.



GreenSpiral™ Type 1 BB / BW HEAT EXCHANGER



The GreenSpiral™ Type 1 BB/BW (Biosolids/ Biosolids and Biosolids/Water) is specifically design to handle highly fouling sludges in the Biogas and Waste Water treatment applications.

GreenSpiral™ Type 1BB / BW Spiral plate heat exchangers are specially designed for digester sludge heating and other heat recovery applications like raw sludge heating and heat recovery from effluents, pasteurization and/or methanisation.

		TYPE 1 LOW PRESSURES	TYPE 1 HIGH PRESSURES	TYPE 2 MULTI- PHASE	TYPE 2 COLUMN	TYPE 3 STEAM HEATER	TYPE 1 BB / BW
APPLICATIONS							
ENERGY	OIL & GAS / REFINERY	✓	✓	✓	✓	✓	
	CHEMICAL	✓	✓	✓	✓	✓	
	HEAVY INDUSTRIES	✓		✓	✓	✓	
	PULP & PAPER	✓		✓	✓	✓	
	POWER	✓		✓	✓	✓	
	HVAC						
FOOD	FOOD RAW MATERIAL	✓		✓	✓	✓	
	PHARMACEUTICAL						
	REFRIGERATION						
	FOOD PRODUCTION	✓		✓	✓	✓	
ENVIRONMENT	WATER TREATMENT						✓
	CARBON CAPTURE						
	CLEAN ENERGY	✓	✓	✓	✓	✓	
	MARINE						
TECHNICAL DATA							
Min temperature (°C)	-100	-100	-100	-100	-100	-100	
Max temperature (°C)	450	500	450	450	450	150	
Max pressure (Bar)	25	100	25	25	25	8	
Max area (m ²)	700	700	700	3000	700	100	

MATERIALS AVAILABLE

Stainless steel

304L
316L
Duplex
Superduplex

Stainless steel / Nickel based alloys

254 SMO
C276
904L
Alloy 59

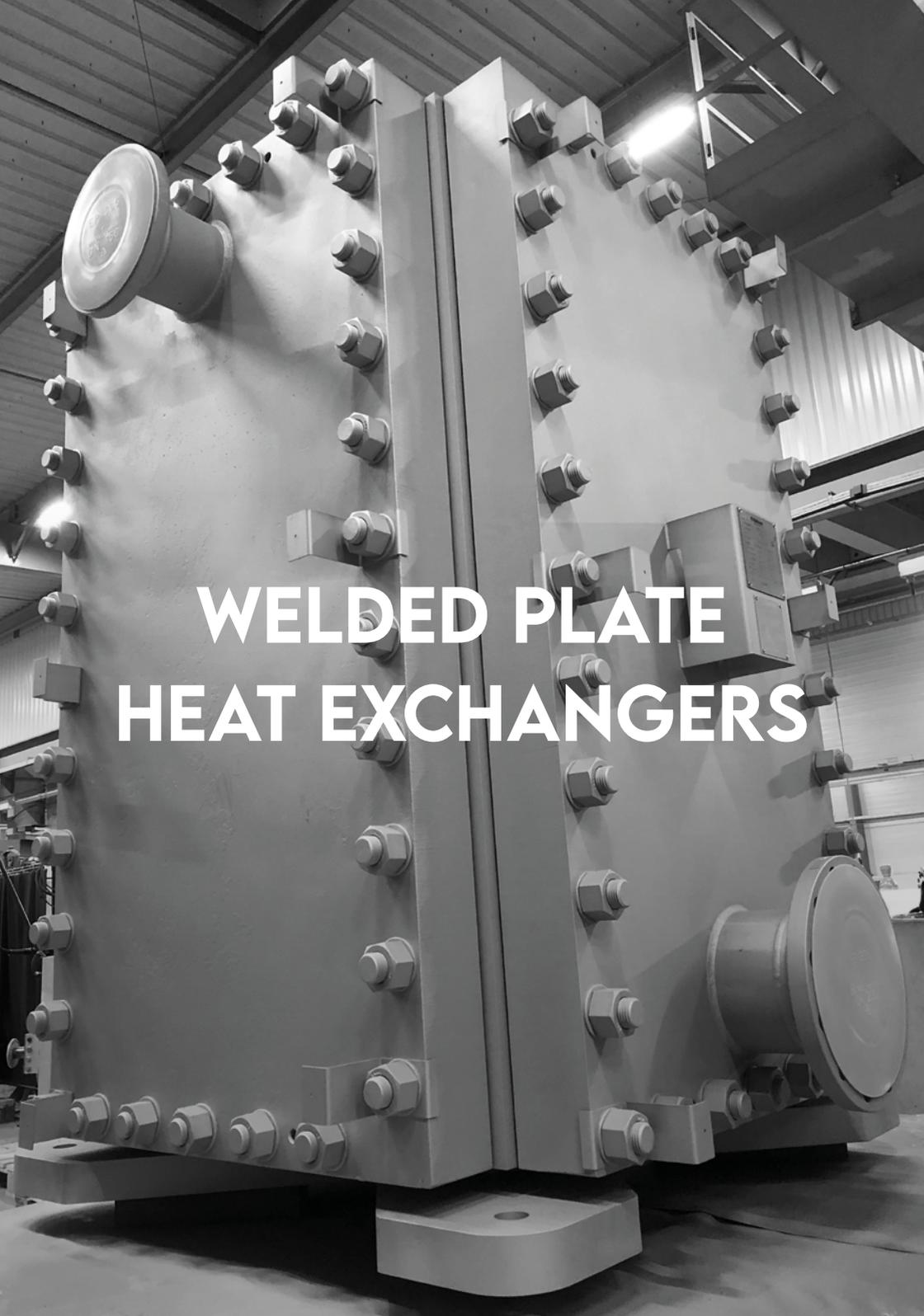
Titanium

Titanium Gr1
Titanium Gr2

Carbon steel

SA516 Gr60
SA516 Gr70

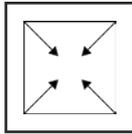
Others materials are available upon request.

A large, industrial-grade welded plate heat exchanger is shown in a factory setting. The unit is composed of two vertical panels of metal plates, held together by numerous bolts and nuts. The panels are supported by a heavy base. The background shows the interior of a factory with a corrugated metal ceiling and various structural elements. The lighting is bright, highlighting the metallic surfaces and the intricate bolt pattern.

WELDED PLATE HEAT EXCHANGERS



ROBUSTNESS



COMPACTNESS



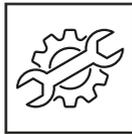
**HIGH TURBULENT FLOW
INDUCED BY OUR
PLATES**



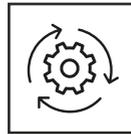
**HIGH PRESSURES
& TEMPERATURES**



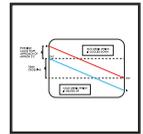
**HANDLE CORROSIVE, ERROSIVE
AND FOULING MEDIAS**



**LOW MAINTENANCE
COSTS**



**LOW OPERATING
COSTS**



**CLOSE TEMPERATURE
APPROACH**

Welded plate heat exchangers - Liquid/Liquid | Biphasic

GreenBox™ Type S

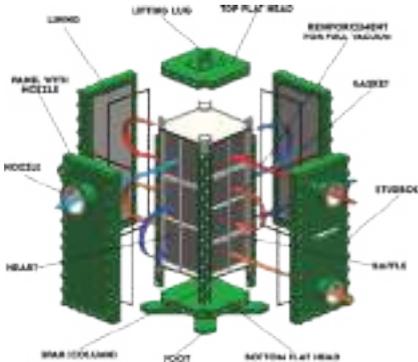
Openable heat exchanger with removable side panels



Nexson GreenBox™ S is a compact welded plate heat exchanger, made of square plates welded together, forming the heat transferring plate pack heart of the heat exchanger. The heart is enclosed into a bolted frame, both hot & cold side channels are easy to access for inspection and cleaning.

There are no gaskets between the plates, instead strong welds makes it leak proof. Only the four removable side pressure panels require four gaskets for external sealing.

Nexson patented soft corners design makes the GreenBox™ S the most robust of its category. The mechanical reliability of the ingenious soft corner design is the ideal solution for operation in tough process duties with high pressures (up to 50 barg) and temperatures (up to 400°C) in liquid/liquid or biphasic applications.



	WX20	WX35	WX50	WX80
Max Plates	100	200	300	500
Max Area (m ²)	6,6	31,1	88,9	384
Max Unit Height (mm)	647	1475	1930	3750
Connection sizes	25-150 DN (1 - 6")	25-300 DN (1 - 12")	25-450 DN (1 - 18")	25-700 DN (1 - 28")



Welded plate heat exchangers - Liquid/Liquid | Biphasic

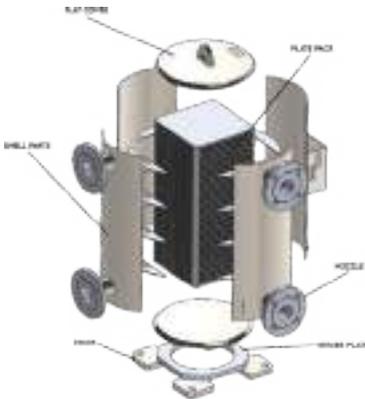
GreenBox™ Type W Fully welded equipment



Nexson GreenBox™ W is a fully welded compact plate heat exchanger, made of square plates welded together, forming the heart of the heat exchanger, which is enclosed into a circular shell frame. The soft corner design patented by Nexson makes this heat exchanger very robust. Due to the fully welded construction, the mechanical internal access is not possible.

There are no gaskets between plates, instead strong welds makes it leakproof, designed for high pressures applications (up to 130 barg) and mainly clean media applications.

This Heat exchanger provides a concentration of thermal efficiency and compactness, making it very versatile and robust, offering in our fit for purposed approach to serve our customers.



	WX20	WX35	WX50	WX80
Max Plates	100	200	300	500
Max Area (m ²)	6,6	31,1	88,9	384
Max Unit Height (mm)	647	1475	1930	3750
Connection sizes	25-150 DN (1 - 6")	25-300 DN (1 - 12")	25-450 DN (1 - 18")	25-700 DN (1 - 28")

Welded plate heat exchangers - Plates options

Corrugated plates

Adapted to clean/semi-fouling medias



Operating conditions	Advantages
<ul style="list-style-type: none">· Temperature : -100°C to 400°C· Max Temperature differences (HSI-CSI) : 200°C· Pressure : from Vacuum up to 55 Barg at full differential conditions (except for soft material*)· Max differential pressure on soft material : 18 barg	<ul style="list-style-type: none">· Robust design (strong welds and patented soft corner design)· High turbulent flow, High K values· No retention area on the back side of the weld· No minimum differential pressure needed in operation

Materials

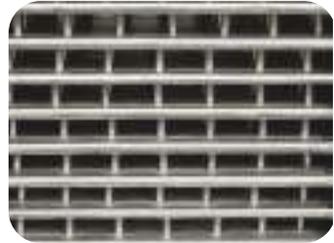
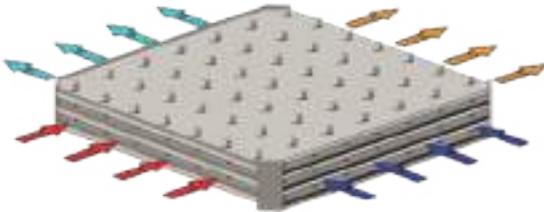
Stainless steel	Stainless steel / Nickel based alloys	Titanium
304L 316L 316Ti	254 SMO C276 904L* Alloy 59 Nickel 200/201*	Titanium Gr1* Titanium Gr11*

Others materials are available upon request.

Welded plate heat exchangers - Plates options

Studded plates

Adapted to fouling medias



Operating conditions	Advantages
<ul style="list-style-type: none">· Temperature : -100°C to 400°C· Max Temperature differences (HSI-CSI) : 250°C· Pressure : from Vacuum up to 40 Barg at full differential conditions (except for soft material)· Max differential pressure on soft material* : 15 barg	<ul style="list-style-type: none">· Robust construction (strong welds and patented soft corner design)· Easy for inspection and cleaning on both media side· Can handle big particles (plate gap up to 30mm)· Can handle long fibers (in a stud free configuration)

Materials

Stainless steel	Stainless steel / Nickel based alloys	Titanium	Carbon steel
304L 316L Duplex Superduplex	254 SMO C276 904L* Alloy 59 Nickel 200/201*	Titanium Gr2* Titanium Gr7*	SA516 Gr70N

Others materials are available upon request.



RECTANGULAR TUBE HEAT EXCHANGERS

-

ENVIRONMENT

Rectangular tube heat exchangers - Environment

GreenTube™ RT Modular heat exchanger



The GREENTUBE™ RT is fully welded compact Heat Exchanger designed primarily for sludge to sludge heat recovery and biosolids treatment. This is a complementary type of heat exchanger to the GREENSPIRAL™ Heat Exchanger for solution with lower capacity.. The GREENTUBE™ range provides a concentration of thermal efficiency and compactness, it is the most robust of its category.

GREENTUBE™ RT are suitable for a wide variety of applications and are used for :

- Media containing large particules and others contaminants
- Media with suspended matter such as fibers
- High viscosity fluids like sludges
- Aggresive media
- Dirty effluent
- etc.

OPENABLE

• Fully openable version for fluids suspected of clogging or coagulation (struvite, fat from industrial waste, large particle etc.)

• Hinges make it easy to open the channel without the need for lifting equipment

• No loss of capacity over the years



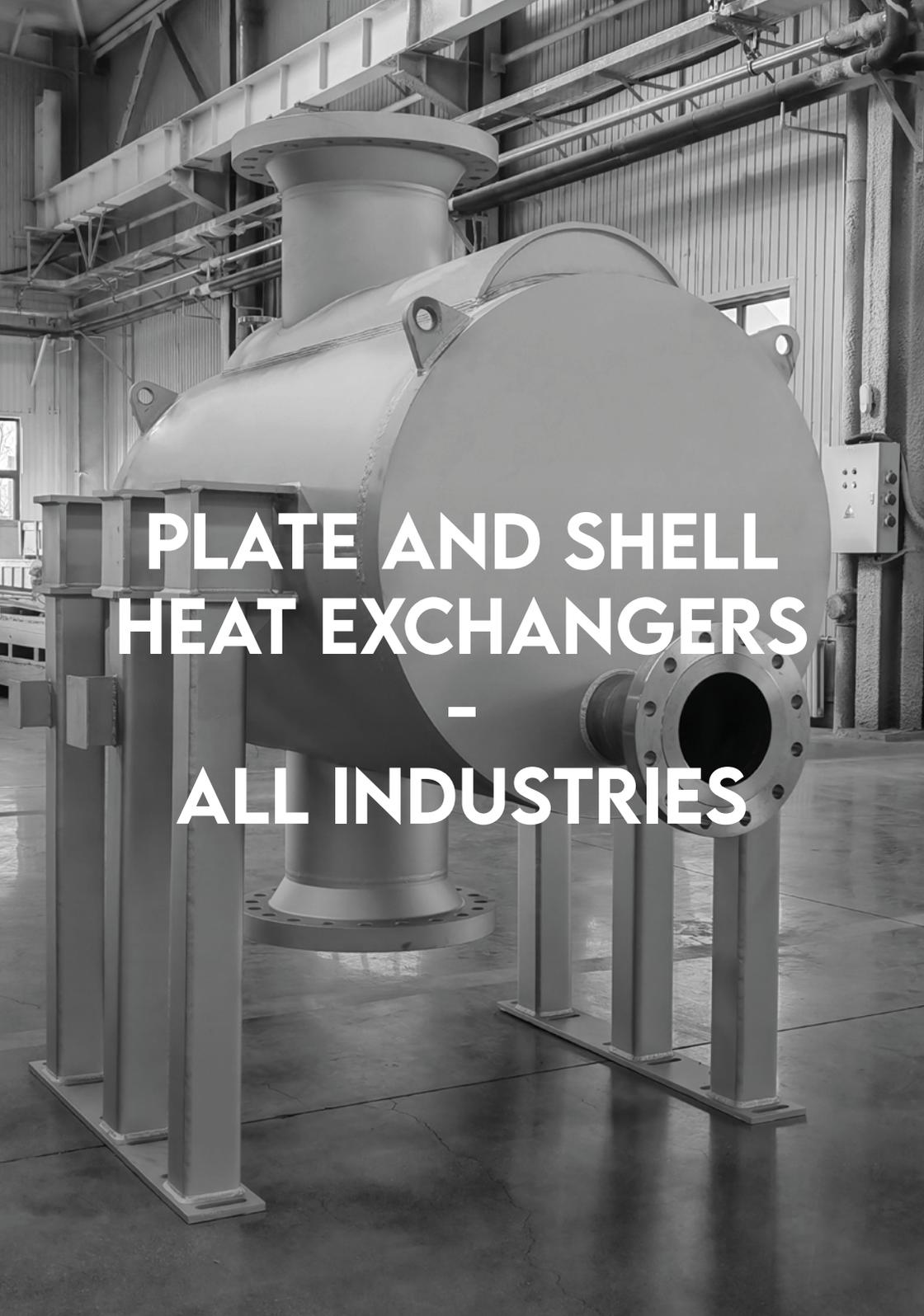
FULLY WELDED EQUIPMENT

• Simple, robust and compact design

• Optimized turn-around area thanks to rounded shape to reduce load losses and deposits

• No risk of leakage or alteration over time

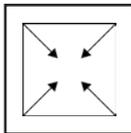


A large, industrial-grade plate and shell heat exchanger is the central focus of the image. It is a massive, cylindrical vessel with a prominent circular access door on the right side. The unit is supported by a sturdy metal frame consisting of several vertical legs. The background shows a typical industrial environment with overhead pipes, structural beams, and a concrete floor. The lighting is bright, highlighting the metallic surfaces of the equipment.

**PLATE AND SHELL
HEAT EXCHANGERS
-
ALL INDUSTRIES**



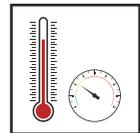
ROBUSTNESS



COMPACT DESIGN



**HIGH TURBULENT FLOW
INDUCED BY OUR
CORRUGATED PLATES**



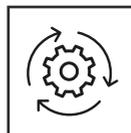
**HIGH PRESSURES
& TEMPERATURES**



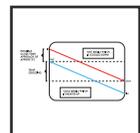
**HANDLE CORROSIVE/
EROSIVE FOULING MEDIAS**



**LOW MAINTENANCE
COSTS**



**LOW OPERATING
COSTS**



**CLOSE TEMPERATURE
APPROACH**

Plate and Shell heat exchangers - Liquid/Liquid | Biphasic

GreenP&S Type W Plate & Shell fully welded



Plate and shell fully welded heat exchangers are suitable for various industrial fields, with advantages such as efficiency, safety, and compactness. They can be customized according to customer specific process conditions, and are resistant to high temperature, high pressure, and corrosion according to the resistance of selected materials.

The core component of Nexson GreenP&S Type W is a set of circular corrugated plates welded together, which achieve sealing between channels through connected welding.

The welded plate core is filled and fixed in the circular shell, and there are no sealing gaskets between the plates. The heat exchanger can be used in corrosive, high-temperature, and high-pressure environments according to the selected materials.

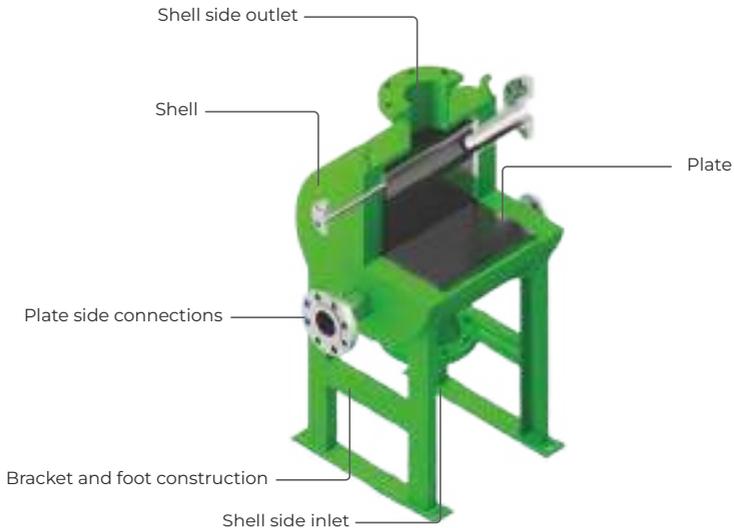


Plate and Shell heat exchangers - Liquid/Liquid | Biphasic

GreenP&S TYPE O Plate & Shell openable



Plate and shell openable heat exchangers are suitable for various industrial fields, with advantages such as efficiency, safety, and compactness. They can be customized according to customer specific process conditions, and are resistant to high temperature, high pressure, and corrosion according to the resistance of selected materials.

The core component of Nexson GreenP&S Type O is a set of circular corrugated plates welded together, which achieve sealing between channels through alternating welding.

The welded plate core is filled and fixed in the circular shell, and there are no sealing gaskets between the plates. It can be applied according to the selected materials in corrosive, high-temperature, and high-pressure environments. The panel is removable, allowing easy access to the shell side of the plate pack for inspection and/or mechanical cleaning.

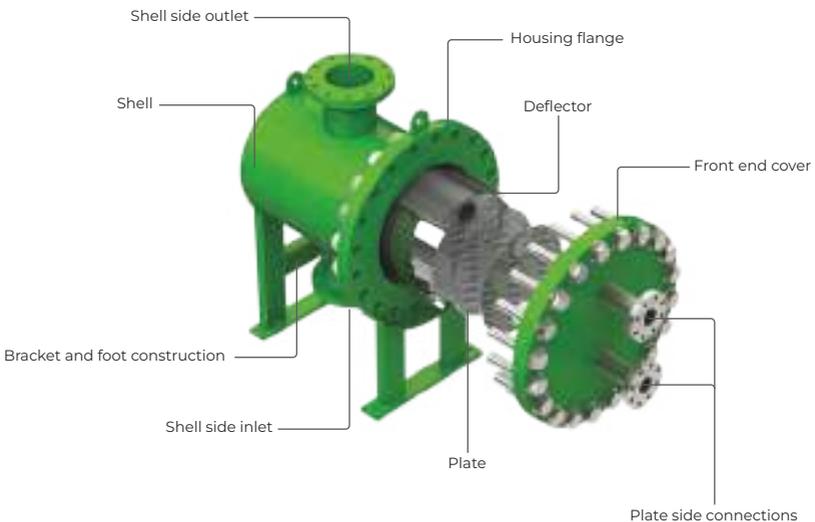


Plate and Shell heat exchangers - Liquid/Liquid | Biphasic

GreenP&S Type K Kettle Reboiler

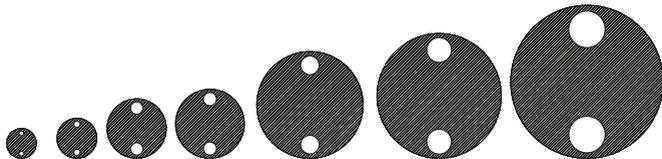


GreenP&S type K, Kettle Reboiler is suitable for various industrial fields, with advantages such as efficiency, safety, and compactness. They can be customized according to customer specific process conditions, and are resistant to high temperature, high pressure, and corrosion according to the resistance of selected materials.

GreenP&S Type K is known as a flooded evaporator. This heat exchanger operates by maintaining a liquid refrigerant level inside the evaporator, ensuring that the heat transfer surfaces are continuously submerged in liquid refrigerant.

This heat exchanger is used to evaporate media (like ammonia) with a hot stream. This solution is widely used in refrigeration, heat pump and ORC cycles. The flow of heat (in the plates) boils the cold bath (in the shell) in counter-current. The manifold ensures good gravitational phase separation. The manifold design limits the size of the shell and therefore the thickness of the shell, as well as the amount of fluid to be evaporate (this results in savings on operating costs).

GreenP&S - Plates range Plate & Shell heat exchanger



Type	NR025	NR050	NR080	NR100	NR150	NR200	NR300
Port diameter (DN)	DN25	DN50	DN80	DN100	DN150	DN200	DN300
Plate diameter (mm)	~200	~300	~450	~600	~900	~1000	~1200

		GREENBOX		GREENTUBE	GREEN P&S		
		TYPE S	TYPE W	RT	TYPE W	TYPE O	TYPE K
APPLICATIONS							
ENERGY	OIL & GAS / REFINERY	✓			✓	✓	
	CHEMICAL	✓	✓		✓	✓	
	HEAVY INDUSTRIES	✓			✓	✓	
	PULP & PAPER	✓			✓	✓	
	POWER	✓	✓		✓	✓	
	HVAC		✓		✓	✓	
FOOD	FOOD RAW MATERIAL	✓	✓		✓	✓	
	PHARMACEUTICAL	✓			✓	✓	
	REFRIGERATION		✓		✓	✓	✓
	FOOD PRODUCTION	✓	✓		✓	✓	
ENVIRONMENT	WATER TREATMENT			✓			
	CARBON CAPTURE	✓	✓		✓	✓	
	CLEAN ENERGY	✓	✓	✓	✓	✓	
	MARINE		✓		✓	✓	
TECHNICAL DATA							
Min temperature (°C)		-100	-200		-196	-196	-196
Max temperature (°C)		400	400	150	500	500	500
Max pressure (Bar)		50	130	8	150	120	120

MATERIALS AVAILABLE

Stainless steel

304/304L
316/316L
316 Ti
Duplex*
Superduplex*

Stainless steel / Nickel based alloys

254 SMO
C276
904L
Alloy 59
Alloy 201

Titanium

Titanium Gr1
Titanium Gr2*
Titanium Gr11
Titanium Gr7*

Carbon steel

SA516 Gr70N

Others materials are available upon request.

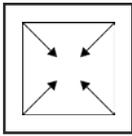
* studded plates

Printed Circuit Heat Exchanger - Liquid/Liquid | Biphasic

Printed Circuit Heat Exchanger - PCHE Ultra-compact & high performance

Printed Circuit Heat Exchangers (PCHEs) are a class of compact, high-performance heat exchangers fabricated using photochemical etching and diffusion bonding techniques. Flow channels, typically 0.1–2 mm in diameter, are chemically etched onto metal plates in a parallel or zigzag arrangement, enabling high heat transfer surface area per unit volume. These plates are then stacked and diffusion bonded under high temperature and pressure to form a monolithic core without welding, resulting in superior mechanical integrity.

PCHEs are capable of operating at pressures exceeding 1000 bar and temperatures over 1000°C, with heat transfer coefficients significantly higher than conventional shell-and-tube exchangers. Their high surface area density (up to 6000 m²/m³) and counterflow design enable exceptional thermal efficiency in a compact footprint. They are particularly suited for applications involving supercritical fluids, high-pressure gas processing, and advanced nuclear and hydrogen energy systems.



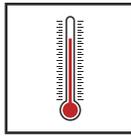
HIGH COMPACTNESS

Small size
light weight
6000m²/m³,
channel size 0.1–2mm



HIGH PRESSURES

The design pressure can reach up to 100MPa, and the welding strength is equal to the strength of the base material



HIGH TEMPERATURES

The design temperature allows -253°C to about 1000°C



MATERIALS

Titanium alloy, stainless steel, duplex steel, high temperature alloy ...



HIGH EFFICIENCY

Very high heat transfer coefficient

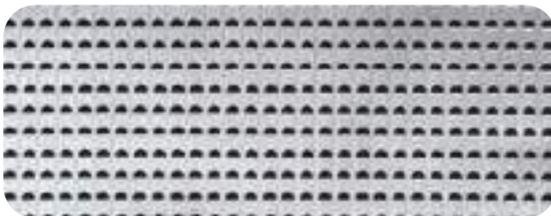


WIDE RANGE OF MEDIA

Natural gas, sea water, hydrogen, antifreeze, etc.



Max unit size :
3000x600x600mm

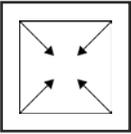


Coil Wound Heat Exchanger - Liquid/Liquid | Biphasic

GreenTube™ - CWHE Coil wound heat exchanger

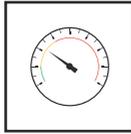
Coil wound heat exchangers are one of the most advanced, efficient and energy-saving heat exchange equipment in the world for such size of heat exchanger. The coil wound heat exchanger is made of one or more groups of spirally wound tubes placed in a shell. The heat exchange tubes has enhanced heat transfer elements such as smooth tubes, corrugated tubes and internal thread external bellows, which are arranged in the shell at different spiral angles.

Due to the spiral design of the tubes, the fluid has to change direction continuously, thus facilitating turbulent flow. This increases heat transfer efficiency and reduces the heat exchange surface area. Compared with ordinary shell and tube heat exchangers, its heat transfer coefficient can be increased by 6 times.



COMPACTNESS

Compact & Smaller than conventional Shell & Tube heat exchangers



HIGH PRESSURES

Up to 300 barg (shell side)
Up to 1400 barg (tube side)



HIGH TEMPERATURES

-250°C to 650°C



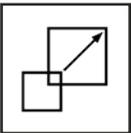
HIGH EFFICIENCY

Very high heat transfer coefficient



MATERIALS

Stainless steel, Special steel alloys, carbon steel, aluminium, copper ...



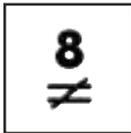
EASY TO ACHIEVE LARGE SCALE

Up to 25 000 m²



CONDENSATION

The tube side medium stays in the heat exchange tube bundle for a longer time, and the condensation is more complete



IMPLEMENT VARIETY OF MEDIAS

Up to 8 different medias simultaneously





Brand of Nexson Group



thermowave GmbH is a leading manufacturer of plate heat exchangers configured according to customer specifications in a wide range of materials, frame designs and sizes. Its head office is in Berga halfway between Göttingen and Leipzig.

The product portfolio covers everything from standard heat exchangers for HVAC applications to highly specialised apparatuses for industrial refrigeration, the food and beverages industry, the chemical and process industry, and the energy sector.

5000 sqm
Production area

3000
Units per years

30+
YEARS
EXPERIENCE

Reliable quality, specialized skills and performance for key components.

Rapid expansion of product portfolio and equipment

The product portfolio was already undergoing expansion as a laser-welding machine now complemented the machine park, making it possible to also offer welded modules.

The product range as well as the technical equipment of the production facilities also continued to grow continuously in the subsequent period. Three product lines leading to the company's decision to build a second production hall for even more sophisticated plate heat exchangers.

Quality experience

Qualified and motivated staff ensure a consistently high level of quality across all products to the benefit of their customers. thermowave's experience in the industrial transfer of heat allow them to develop new innovative products to launch onto the market.



**PLATE HEAT
EXCHANGERS
RANGE**

Plates type



Gasketed



Semi-welded



Double wall

Gasket connections - Snap on

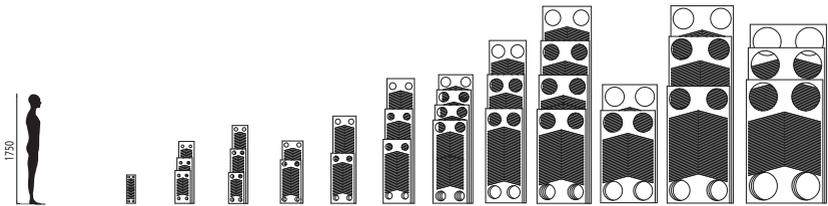


Materials

Plates			Gaskets
Stainless steel	Stainless steel / Nickel based alloys	Titanium	NBR
304L	254 SMO	Titanium Gr1	EPDM
316L	C276	Titanium Gr11	HNBR
	904L		FKM
	Alloy 59		FEPM
	Nickel 200/201		VITON A
			VITON G
			HY01

Others materials are available upon request.

Plates range



Port diameter (DN)	25	40	50	65	80	100	150	200	250	300	350	450
Length max. (mm)	449	981	1236	986	1383	1976	2094	2573	3122	1872	3126	2831
Width max. (mm)	140	244	246	329	369	437	546	586	774	868	995	1215
Length / Width	3.21	4.02	5.02	2.99	3.74	4.52	3.84	4.39	4.03	2.15	3.14	2.33



Makes life fresh

Expert of Plate Heat Exchangers

thermolineECO™

Gasketed & Double wall



thermolineVARIO™

Gasketed, Semi-welded
& Double wall



thermolinePLUS™

Gasketed, Semi-welded
& Double wall



thermolinePURE™

Gasketed, Semi-welded
& Double wall



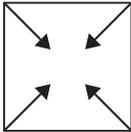
Gasketed Plate Heat Exchangers

thermolineECO, VARIO, PLUS & PURE **Flexible and high efficient solution**

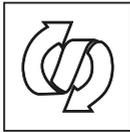
thermowave products versatile are designed to optimize heat exchange between fluids, offering unmatched performance and reliability.

The gasketed plate heat exchangers are engineered with precision, featuring individually stamped heat transfer plates with gaskets around each plate. This innovative design ensures a tight seal, preventing leaks and maximizing heat transfer efficiency.

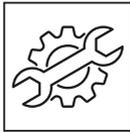
Investing in gasketed plate heat exchangers can lead to significant cost savings over time.



COMPACTY



VERSATILITY



**EASY
MAINTENANCE**



**HIGH TRANSFER
EFFICIENCY**



COSTS SAVING

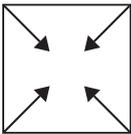


Semi-welded Plate Heat Exchangers

thermolineVARIO, PLUS & PURE Hybrid design

thermowave products semi-welded plate heat exchangers combine the reliability of welded construction with the versatility of gasketed plates, offering unparalleled performance in a variety of applications.

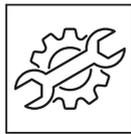
Semi-welded plate heat exchangers feature a unique design that incorporates both welded and gasketed plates. This hybrid construction provides a secure seal for one fluid stream while allowing for easy disassembly and maintenance of the other. The result is a durable and efficient heat exchanger that can withstand demanding operating conditions.



COMPACTY



VERSATILITY



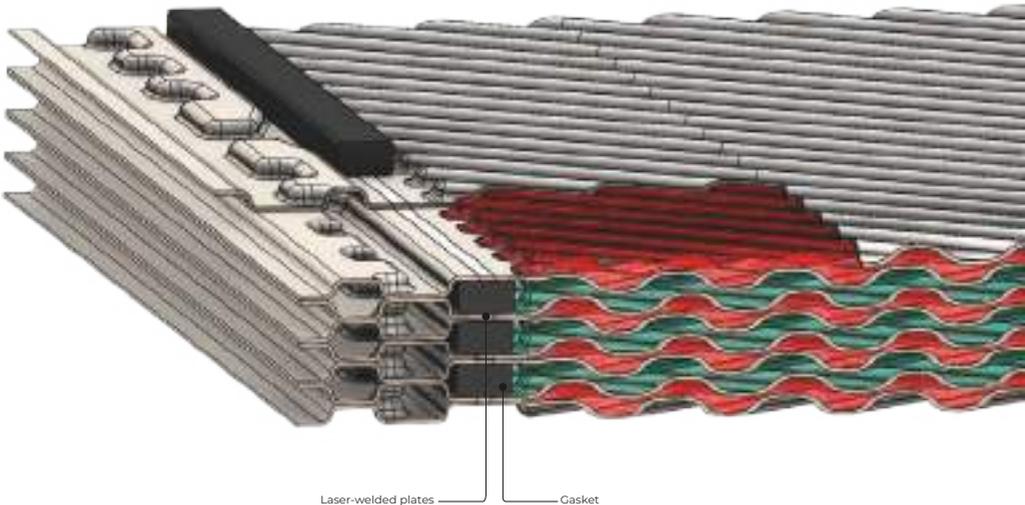
EASY
MAINTENANCE



HIGH TRANSFER
EFFICIENCY



HYBRID DESIGN

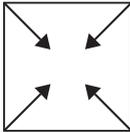


Double Wall Plate Heat Exchangers

thermolineECO, VARIO, PLUS & PURE Ultimate solution for fluid safety

thermowave products double wall plate heat exchangers are a vital innovation for industries that demand flawless fluid separation and efficient heat transfer. Whether used in food and beverage production, pharmaceutical manufacturing, or chemical processing, our exchangers ensure superior safety and unmatched reliability.

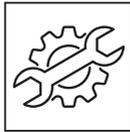
Our double wall plate heat exchangers feature two layers of plates between the hot and cold fluids, creating an extra barrier that prevents cross-contamination. This design allows for visible leak detection if one layer is compromised, ensuring safety. The unique construction guarantees optimal performance while prioritizing the integrity of the fluids.



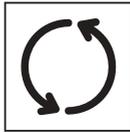
COMPACTITY



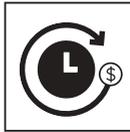
RELIABILITY
IN CRITICAL
APPLICATIONS



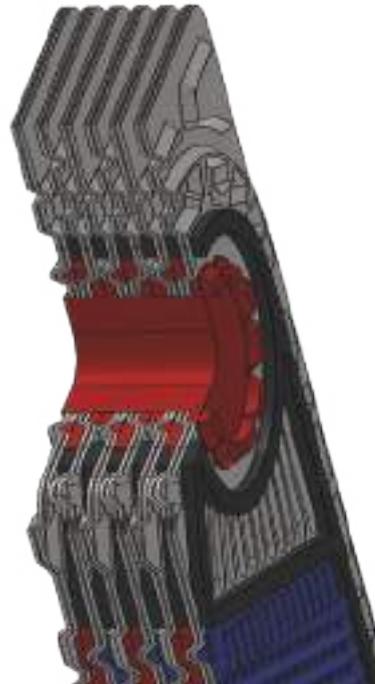
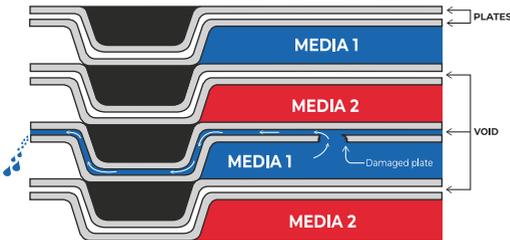
EASY
MAINTENANCE

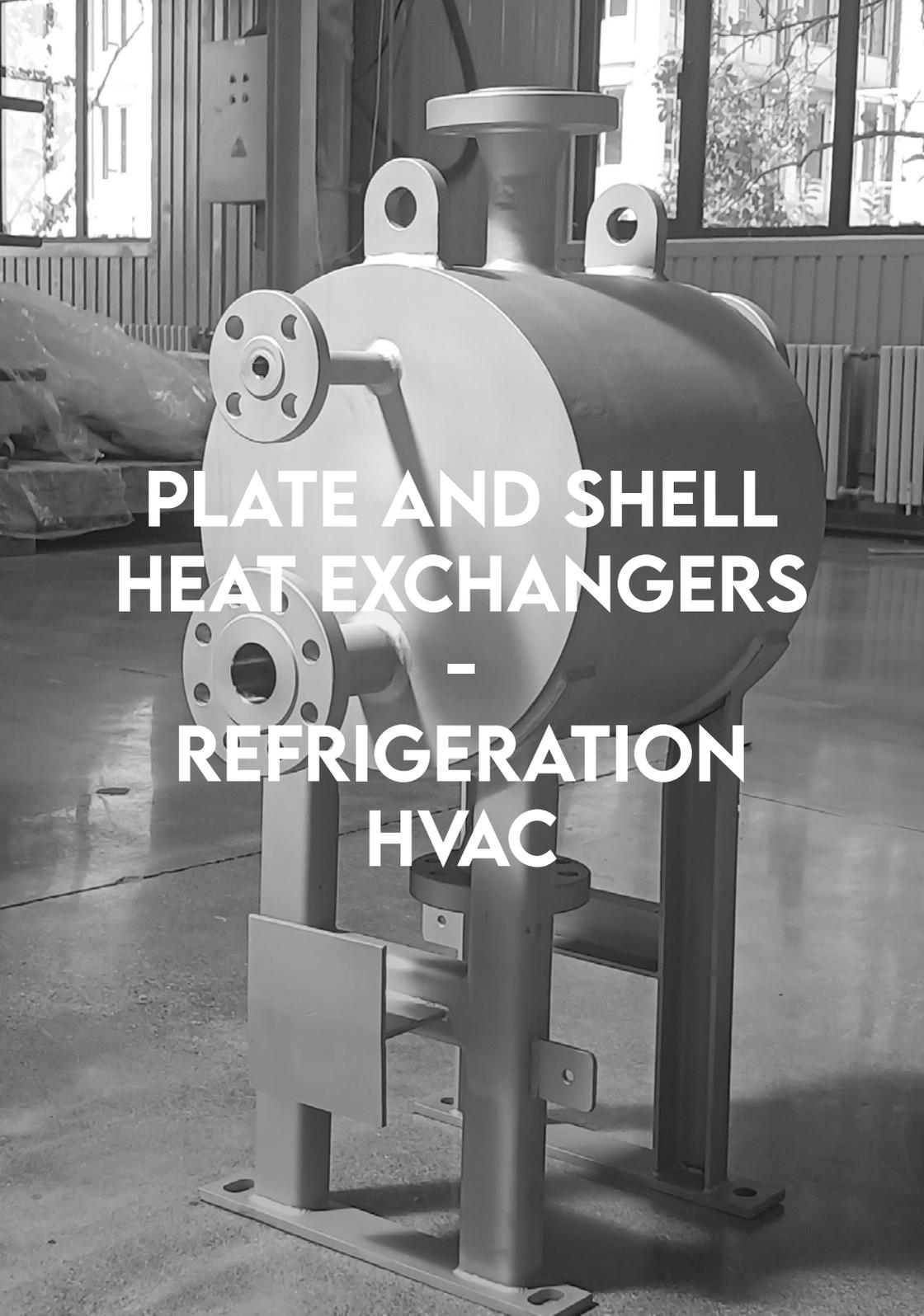


DURABILITY



LONG-TERM
COST-EFFECTIVENESS



A large industrial plate and shell heat exchanger unit is shown in a factory setting. The unit is cylindrical with a large circular front panel and is mounted on a metal frame. It has several flanged ports and a central vertical pipe. The background shows a factory floor with large windows and some equipment.

**PLATE AND SHELL
HEAT EXCHANGERS
-
REFRIGERATION
HVAC**

Plate and Shell heat exchangers - Liquid/Liquid | Biphasic

Plate & Shell Type W Plate & Shell fully welded



The core component of GreenP&S Type W is a set of circular corrugated plates welded together, which achieve sealing between channels through alternating welding.

The welded plate core is filled and fixed in the circular shell in a fully welded construction, and there are no sealing gaskets between the plates. It can be applied as per selected materials in corrosive, high-temperature, and high-pressure environments.

Plate & Shell Type O Plate & Shell Openable



GreenP&S Type O is a set of circular corrugated plates welded together, which achieve sealing between channels through alternating welding.

The welded plate pack core is welded on the pressure vessel cover and inserted in the circular shell, and there are no gaskets between the plates. This heat exchanger can be applied in corrosive, high-temperature, and high-pressure environments. The Flanged pressure panel with the attached plate pack is removable, allowing the easy access to the shell side of the plate pack for inspection and/or mechanical cleaning.

Plate & Shell Type K Kettle Reboiler

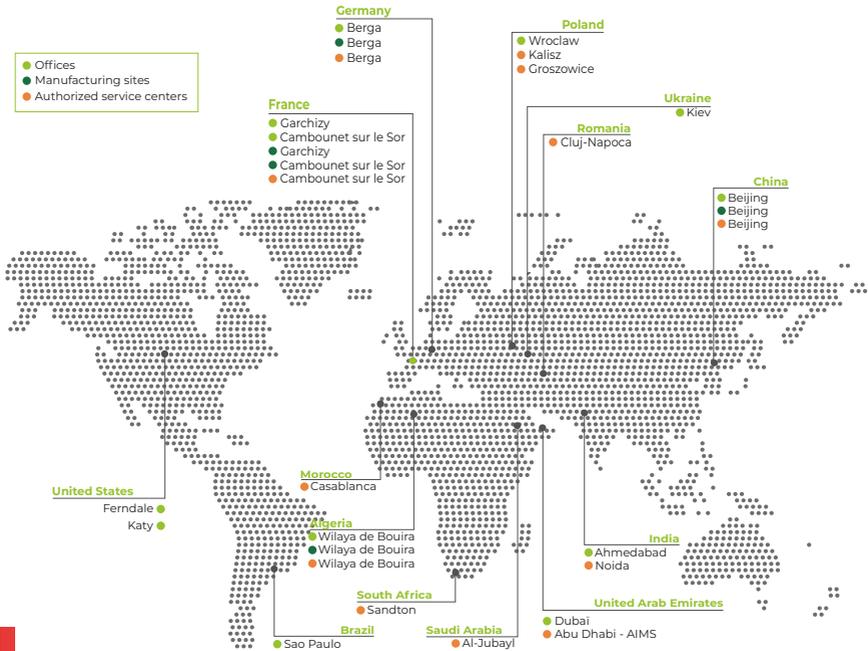


GreenP&S Type K is used to evaporate media (like ammonia) with a hot stream. This solution is widely used in refrigeration, heat pump and ORC cycles. T

The flow of heat (in the plates) boils the cold bath (in the shell) in counter-current. The manifold ensures good gravitational phase separation. The manifold design limits the size of the shell and therefore the thickness of the shell, as well as the amount of fluid to be evaporate (savings on operating costs).



- Offices
- Manufacturing sites
- Authorized service centers



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