

InKorr

This product is represented in Australia, New Zealand, and PNG by:

InKorr Pty Ltd

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Contact InKorr Pty Ltd for:



Heat Exchangers

- Shell & Tube Heat Exchangers
- Gasketed Plate Heat Exchangers
- Brazed Plate Heat Exchangers
- Crossflow Welded Plate Heat Exchangers
- Plate & Shell Heat Exchangers
- Non Metallic Heat Exchangers
- Corrugated Tube Heat Exchangers
- Spiral Heat Exchangers
- Air-Cooled Heat Exchangers



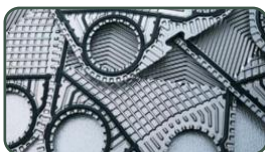
Vessels, Columns, and Equipment manufactured from:

- Exotic Alloys (Ta, Zr, Ti)
- Graphite and Silicon Carbide
- PTFE Lining



Plastic Lined Valves and Piping

- PTFE
- PVDF
- PP
- and many more!



Servicing and reburishment of heat exchangers!

- Plate cleaning
- NDE for crack testing
- Spare parts, both OEM and aftermarket

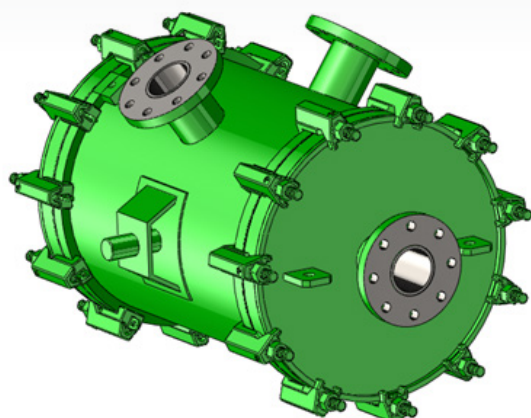


Spiral Plate Heat Exchanger (SPHE) 1

Standard range: Liquid / Liquid

“Economical and short delivery time”

Nexson team : 20 years experience in designing and manufacturing Spiral Plate Heat Exchangers



Models : 1L-3L-6L-9L-15L

Fluids circulate in countercurrent flow through the channels, providing possibility of medias temperatures cross and approach around 3°C. Thanks to its specific design, the Spiral can handle two fouling fluids. Anyhow, both channels are easy to access for inspection or eventual cleaning.

Area M ²	Diameter	Width	Hot side connections	Cold side connections	Spacing
1	215	200	25/25	25/25	5/5
3	405	200	50/50	50/50	5/5
6	485	300	50/50	50/50	6/6
9	470	625	80/80	80/80	8/8
15	645	500	80/80	80/80	8/8

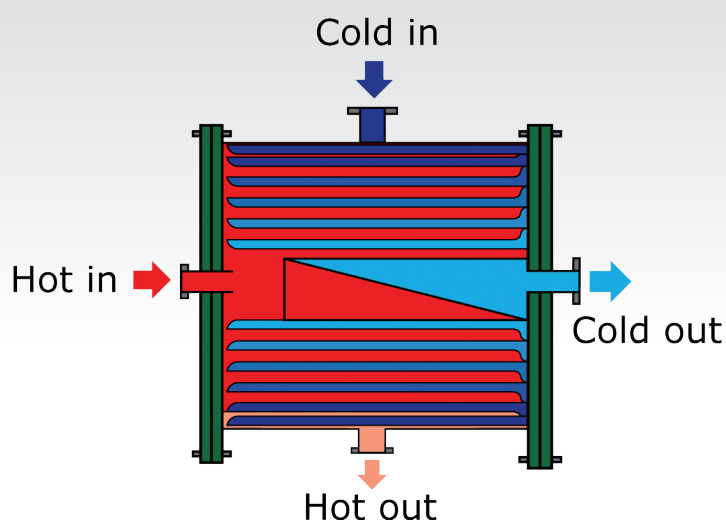
Applications

Petrochemical, fine chemical, bioethanol, cutting oil, Refinery, petrol & gas, petrochemicals, coke oven gas, steel, mining, pulp & paper, industrial oven...

All fluid types containing fiber, particles, sludges and other viscous or abrasive medias.

It is possible to use it as:

- Interchanger
- Heater
- Cooler



Conditions of use

Design temperature: -30°C up to 250°C
Design pressure: 10 Barg
Material: 316 / 316L

Design code section VIII div 1 + PED 9723 EC
Flanges EN 1092 1 02 A - Gaskets: Klingersil C4430
Surface treatment: pickled passivated



Customer benefits

> ENERGY SAVING

Spiral design and optimization of conditions in both channels of customized SPHE 1 provide high heat transfer performance and reduction of energy costs habitually needed to heat liquids.

> AVAILABILITY AND COST SAVING

Nexson Group sas provides a standard range of spiral heat exchanger with the possibility to save costs comparing to customized units.

> LOW INSTALLATION COST (COMPACT)

The SPHE is design in order to maximize heat transfer surface. It can be set up vertically or horizontally and it is not necessary to have complex installation. By consequent, a SPHE ensures a low installation budget.

> LOW OPERATING COST

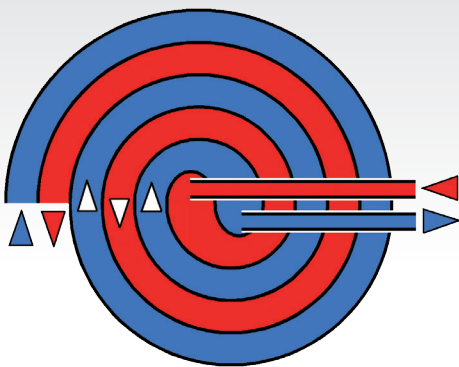
This system allows an easy access in case of inspection, or eventual cleaning, removing the covers handled with fixations.

> LOW MAINTENANCE COST (SELF CLEANING EFFECT)

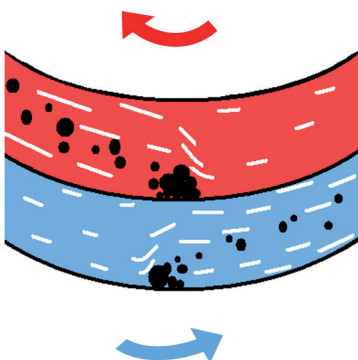
through the open channels, the channel design in the SPHE reduces bypassing through the velocity in the channel spiral that increases until deposits are eliminated. This system allows to the SPHE to work in extreme conditions.

> EASY ACCESS FOR INSPECTION AND CLEANING

These heat exchangers can be easily cleaned by opening the covers, giving total access to the whole heat transfer area.



The hot flow enters in the center of the heat exchanger and exit to the outside. The cold flow is from the periphery to the center : counter- current flow effect.





Spiral Plate Heat Exchanger (SPHE)

Standard range : 2 phases duties for vapor / gas

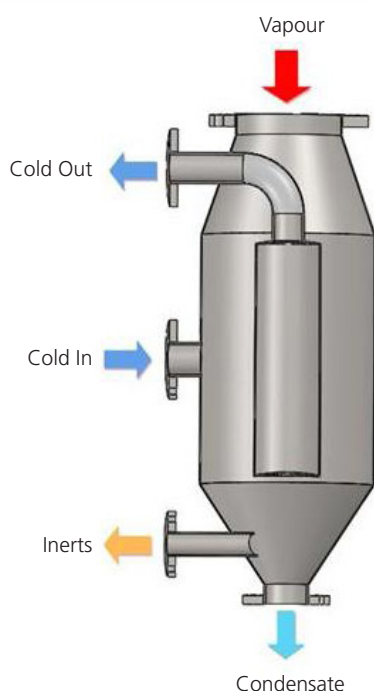
“Economical and short delivery time”

Nexson team : 20 years experience in designing and manufacturing Spiral Plate Heat Exchangers

Models: 1C-3C-6C-9C-15CL

Heat Exchanger 2 phases duties. Condensing mode:

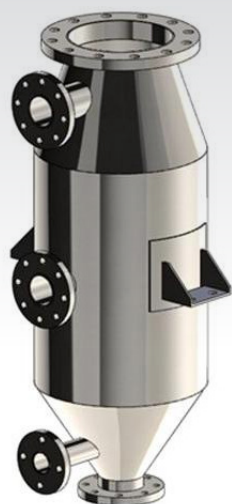
The vapor circulates, cross flow, in a fully opened channel, with negligible pressure drop and the coolant circulates in a closed spiral channel. Thanks to his versatile design, it can be directly installed on the top of a column/rector without any supporting system, reducing quite much installation cost. It is perfectly suitable for vacuum condensation with negligible pressure drop. It can be used as vent condenser.



Area M ²	Diameter	Width	Hot side connections	Cold side connections	Spacing
1	215	200	25/25	200/200	5/5
3	405	200	50/50	200/100/50	5/5
6	455	300	50/50	200/100/50	5/5
9	445	625	80/80	250/100/50	5/8
15	540	625	100/100	250/100/80	5/8

Characteristics

- Available in 5 models
- In stock
- The ideal solution to replace shell & tubes or existing spirals by minor adaptation



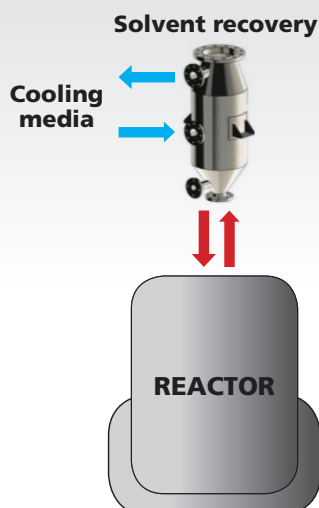
Conditions of use

Design temperature: -100°C up to 250°C
Design pressure: 6 Barg
Materials: 316 / 316L

Design code VIII div I + PED 9723 EC
Flanges: EN 1092 1 02 A
Surface treatment: pickled passivated



Customer benefits



- > **STANDARD DESIGN: ECONOMICAL & SHORT DELIVERY TIME**
- > **NEGLIGIBLE PRESSURE DROP**
- > **HIGH VAPOR FLOW**
- > **LOW MAINTENANCE COST (SELF CLEANING EFFECT)**
- > **LOW INSTALLATION COST (DIRECT COLUMN MOUNTED AND COMPACT SIZE)**
- > **LOW OPERATING COST**
- > **OPERATE ORDER DEEP VACUUM**
- > **100% STANDARD STEEL**

Applications

It is possible to use it as:

- Vacuum condenser
- Gas cooler
- Reflux condenser
- Vent condenser



Spiral Plate Heat Exchanger (SPHE)

Standard range : sludge & biosolid treatment (SBT)

“Economical and short delivery time”

Nexson team : 20 years experience in designing and manufacturing Spiral Plate Heat Exchangers

Conception



SPHE GreenSpiral® is made of two concentric channels, the spacings and width of which are controlled by special guideways and chosen in accordance with Customer's requirements and working conditions. This approach of the SPHE design allows to take into account such parameters as fluids flow rate, presence and concentration of mechanical impurities (solids, fibers, etc...), pressure drop values.

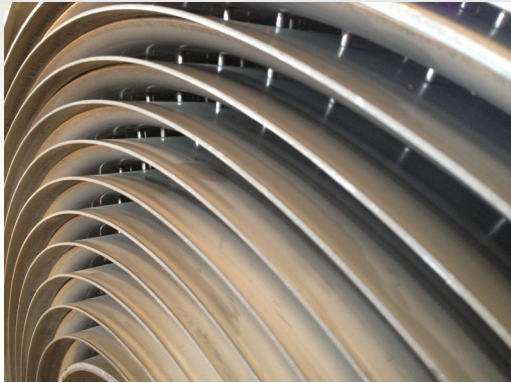
Advantages:

- Self-cleaning effect
- Compact
- No dead zone in the channels
- Robustness (high pressure and temperature)
- Can work in extreme conditions of corrosion and erosion

Applications

This range is specially designed for digester sludge heating and heat recovery applications, such as digested sludge, raw sludge and heat recovery from effluents. The SPHE 3 can be used with all types of sludges, including fibers, particles, and other viscous and abrasive fluids

	SBT 60	SBT 100	SBT 150	SBT 200	SBT 300	SBT 450	SBT 600	SBT 700	SBT 900
Capacity KW	60	115	145	220	300	440	585	705	875
Hot side DN connexion	50/50	80/80	80/80	100/100	150/150	150/150	150/150	150/150	150/150
Cold side DN connexion	80/80	100/100	100/100	150/150	150/150	150/150	150/150	150/150	150/150
Design Pressure Barg	4	4	4	4	4	4	4	4	4
Design Temp °C	150	150	150	150	150	150	150	150	150

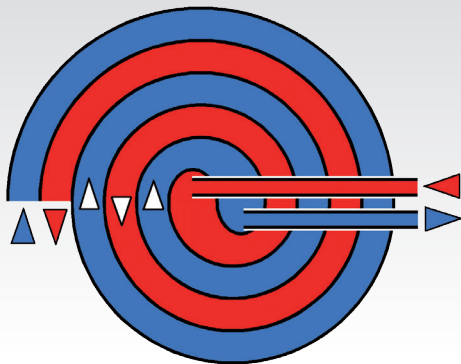


Conditions of use

Design temperature: 150°C
Design pressure: 4 Barg

Materials

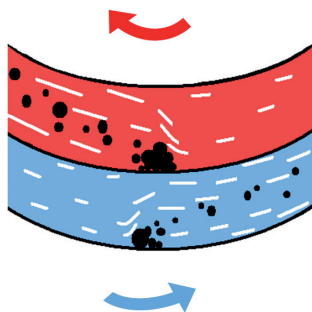
Stainless steel, carbone steel, SA 516, Gr 60/70, 304 / 304L, 316 / 316L.



The hot flow enters in the center of the heat exchanger and exit to the outside. The cold flow is from the periphery to the center : counter- current flow effect.

Design following Section VIII Div I + PED 9723 EC

- Removable sludge cover with clamp-bolts
- Available in CS & SS
- Custom-designed for each service
- EN 1092 1 02A
- DN100 clean-out port with cap at sludge entry
- Tangential inlet port at sludge entry
- DN50 back-flush nozzles for sludge circuit
- Others on request



Customer benefits

> ENERGY SAVING

Spiral design and optimization of conditions in both channels of customized SPHE provide high heat transfer performance and reduction of energy costs habitually needed to heat liquids.

> AVAILABILITY AND COST SAVING

Nexson Group sas provides a standard range of spiral heat exchanger with the possibility to save costs comparing to customized units.

> LOW INSTALLATION COST (COMPACT)

The SPHE is design in order to maximize heat transfer surface. It can be set up vertically or horizontally and it is not necessary to have complex installation. By consequent, a SPHE ensures a low installation budget.

> LOW OPERATING COST

This system allows an easy access in case of inspection, or eventual cleaning, removing the covers handled with fixations.

> LOW MAINTENANCE COST (SELF CLEANING EFFECT)

Even though in multi pass heat exchanger clogging redirects the flow through the open channels, the channel design in the SPHE reduces bypassing through the velocity in the channel spiral that increases until deposits are eliminated. This system allows to the SPHE to work in extreme conditions.

> EASY ACCESS FOR INSPECTION AND CLEANING

These heat exchangers can be easily cleaned by opening the covers, giving total access to the whole heat transfer area.

NG1-PDT06ENG

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