



For over 35 years we have been perfecting our products to give you the confidence of making the best choice.

Our story

Since 1988, we have been inspiring people to save our planet's resources through efficient heat transfer. With our reliable exchangers, systems gain in efficiency. An innovative approach combined with the passion of our engineers enables thousands of our customers around the world to reduce costs, save time and make a positive impact on the environment. Their satisfaction makes us proud and at the same time confirms the quality of our brand.

Our commitment

Our commitment is to create the most efficient methods of heat transfer. Thanks to this approach, we are confident that we can take good care of our clients and provide them with high-quality products and construction solutions.





Selection Software for Hexonic Heat Exchangers

We give you the opportunity to work from anywhere in the world!

With Microsoft Azure solution, CAIRO program requires no installation. It's accessible from any internet browser-enabled device.

We've got your back at every selection stage - supporting you all the way!

We can have real-time access to your projects, which will greatly facilitate our dialogue and ensure the accuracy of the selection of heat exchangers. Just click on the contact icon on the main screen.

WHAT SETS OUR CAIRO SELECTION PROGRAM APART?



application selections



advanced project management capabilities



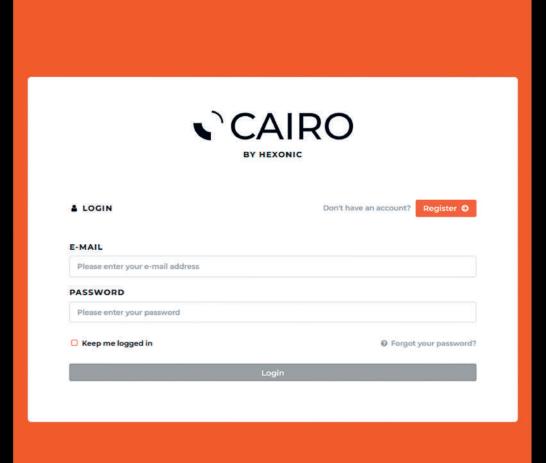
access to the technical database of Hexonic products



insight into the properties of fluids used in a selection



calculator for estimating maximum pressure drops in heat exchangers



Visit our website!



cairo.hexonic.com

JAG

Plate Heat Exchangers

From the passion for innovation a new product has been born – JAG Plate Heat Exchanger with inventive jagged pattern of a heating plate. Breaking new ground solution brings not only enhanced flow turbulence but also increased heat exchange area. Together it gives more compact, lighter but most of all more efficient device which can be customized to your individual requirements. Highly efficient JAG Plate Heat Exchanger will become a long-life dependable solution for your applications.

APPLICATION

- chemical industry
- food & bev industry
- HVAC-R
- iron and steel industry
- pulp & paper industry
- marine industry
- power

WORKING PARAMETERS

· max. pressure: 150, 250, 300, 400 psi

· max. temperature: 300°F

min. temperature: -4°F



INNOVATIVE CORRUGATION DESIGN



UP TO 10% HIGHER HEAT TRANSFER EFFICIENCY



UP TO 10% LOWER PRESSURE DROP FOR HIGH FLOW PATTERN



ENHANCED FLOW TURBULENCE

9

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WW



DECREASED FOULING



INCREASED HEAT EXCHANGE AREA



INCREASED PLATE DURABILITY



PED, ASME, AHRI **CERTIFICATION ARE AVAILABLE**

Heat exchangers dedicated to heating or cooling systems.

APPLICATION

- tap water heating systems
- central heating systems
- · solar and geothermic heating systems
- · installations with heat pump
- · installations with fireplace and water jacket
- · heating, technological, cooling and industry installations
- · immersion cooling solutions

WORKING PARAMETERS

• max. temperature: 446°F

• min. temperature: -150°F

max. pressure: 435 psi













Heat exchangers entirely made of stainless materials designed to maintain high sanitary standards.

APPLICATION

WHEN HIGH LEVEL OF HYGIENE IS CRUCIAL

- systems with demineralized water
- · cooling systems with high hygienic standards
- tap water heating systems

WHEN RELIABILITY IS ESSENTIAL

- central heating systems
- · systems with aggressive media
- · systems with galvanized pipes
- · industrial cooling systems
- hydraulic oil cooling

WORKING PARAMETERS

max. temperature: 392°F

• min. temperature: -150°F

· max. pressure: 232 psi





STAINLESS BRAZING
ALLOWS HOMOGENEOUS
CONSTRUCTION



HIGH SANITARY STANDARDS



WIDE RANGE OF APPLICATIONS



HIGH DURABILITY



RESISTANCE TO HIGH TEMPERATURE AND PRESSURE



RESISTANCE TO CORROSION



Brazed plate heat exchangers designed for use in cooling or heating installations. Refrigerant evaporators, condensers and economizers.

APPLICATION

- chillers
- · refrigeration units
- · ice water generators
- heat pumps
- · cooling systems with special construction

WORKING PARAMETERS

max. temperature: 302°Fmin. temperature: -150°F

· max. pressure: 653 psi





OUTSTANDING RELIABILITY



OPTIMIZED FOR MODERN REFRIGERANTS



RESISTANCE TO CYCLIC FATIGUE



RESISTANCE TO FREEZING



SPECIAL CHANNEL PATTERN ENSURES EFFECTIVE EVAPORATION OR CONDENSATION



MANUFACTURED IN ACCORDANCE WITH ASME, UL, PED

SafePLATE

LC140SP

The SafePLATE heat exchangers have been designed for applications requiring high heat exchange efficiency, where it is crucial to help prevent the working media from mixing in case of internal leakage. Such leakage, although very unlikely, may result from corrosion or hydraulic impact in the system.

In such case the specially designed double wall layout and a slot on the side surface of the exchanger leads the leakage outside, which allows for its quick visual detection and undertaking appropriate preventive measures.

APPLICATION

- tap water heating systems
- · central heating systems
- technological systems

WORKING PARAMETERS

max. pressure: 290 PSI

max. temperature: 446°F

• min. temperature: -319°F



Pool Heat Exchangers

B, TI, REV

Special design of our pool heat exchangers boosts heat transfer and delivers better utilization of heat source. Equipped with straight tubes all of the models ensure low pressure loss thus saving energy. Corrugated straight tubes promote turbulent flow which further intensifies heat exchange and helps reduce fouling.

APPLICATION

- pool with treated water
- salt water swimming pool
- · oceanarium
- · olympic pools
- · aqua parks

WORKING PARAMETERS

- · max. temperature up to: 329°F
- · min. temperature up to: -4°F
- · max. pressure: 232 psi















Shell & Tube Heat Exchangers

DNA heat exchangers constitute another step in the evolution of shell and tube exchangers.

They provide a number of hydraulic and heat exchange improvements, preserving the features and benefits of the traditional design.

APPLICATION

- low pressure steam condensers (flash steam condensers)
- · industrial and chemical processes
- · recuperation and regeneration in industrial technologies
- · waste heat recovery diesel and gas engines, cogeneration systems
- · water and steam systems, cooling circuits

WORKING PARAMETERS

- · max. temperature up to: 392°F
- min. temperature up to: -4°F
- · max. pressure:

shell side: 145 psi

tube side: 232 psi



HIGHLY EFFECTIVE HEAT TRANSFER AREA



TURBULENT VORTEX FLOW



LOW PRESSURE DROP



NO DEAD SPOTS



MULTIPLE CONTACT POINTS ALONG THE TUBE BUNDLE



LARGE HEAT TRANSFER
AREA CONTAINED
IN COMPACT
CONSTRUCTION





Shell & Coil Heat Exchangers

The design and performance of HAD shell and coil heat exchangers make them perfect for the most demanding applications. Due to their properties, HAD heat exchangers are most often used in steam applications, especially when condenser subcooling is required.

APPLICATION

- HVAC systems
- steam applications
- · heating and cooling systems
- · heat transfer in industrial processes
- oil coolers
- · CIP systems

WORKING PARAMETERS

· max. temperature: 482°F

min. temperature: -4°F

· max. pressure: 363 psi





COMPACT SIZE



LARGE HEAT EXCHANGE AREA



LOW MAINTENANCE COSTS



HIGH PERFORMANCE



TURBULENT FLOW PROMOTED BY CORRUGATION OF TUBES



VERTICAL INSTALLATION REDUCES SPACE REQUIREMENTS



MANUFACTURED IN ACCORDANCE WITH PED, ASME



FACTORY-INSTALLED INSULATION



Shell And Coil Heat Exchangers

With a proven design and performance, RAD shell and coil heat exchangers are perfect for refrigerant applications, especially in ground source heat pumps. Direct refrigerant inlet into each of the heat exchanger tubes ensures uniform medium distribution. RAD has a high heat transfer coefficient and is designed for modern A2L refrigerants such as R32, R452B, R454B.

WORKING PARAMETERS

shell side (water):

max. pressure: 232 psi

max. temperature: 392°F

coil side (refrigerant):

max. pressure: 652 psi

max. temperature: 266°F



OPTIMIZED FOR MODERN REFRIGERANTS



EVEN REFRIGERANT
DISTRIBUTION
WITH LOW
MALDISTRIBUTION
RISK



PROVEN TECHNOLOGY



RESISTANCE TO HIGH PRESSURE



EFFECTIVE HEAT TRANSFER AREA



EASY INSTALLATION AND SMALL FOOTPRINT



MANUFACTURED IN ACCORDANCE WITH PED, ASME



HIGHLY RESISTANT TO CORROSION

P-line

Shell & Tube Heat Exchangers

Hexonic P-line heat exchangers meet the challenges offered by the pharmaceutical industry. They also meet its restrictive hygienic standards imposed by inspection authorities and the industry. They were designed so to minimize the risk of contamination and ensure safe and sterile operation.

APPLICATION

- production of high purity inhalation medicines
- production of advanced therapy medicinal products (atmp):
- gene therapy products
- · somatic cell therapy medicinal products
- tissue engineering products
- · production of ophthalmic medicines and contact lenses
- · production of biotechnological preparations
- · production of diagnostic preparations
- · cleaning of containers, packaging and installations.

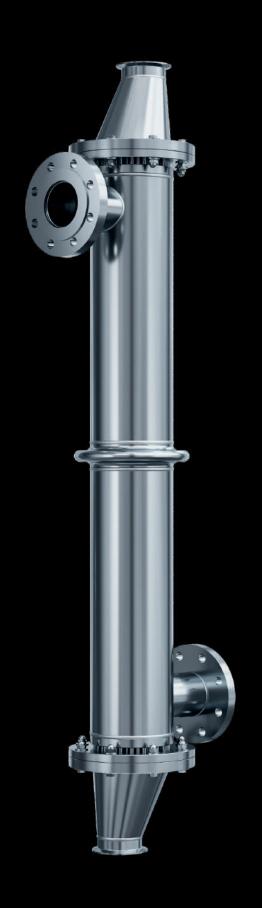
WORKING PARAMETERS

• max. temperature:

tubes: 284°F

shell: 392°F

- min. temperature up to: -13°F
- · max. pressure: 145 psi





DESIGNED TO OPERATE IN PHARMACEUTICAL PRODUCTION





MADE ENTIRELY
OF STAINLESS STEEL



ONE-, TWO-, AND FOUR-PASS TYPES



HORIZONTAL AND VERTICAL MODELS AVAILABLE



SURFACES THAT COME
INTO CONTACT WITH PURE
MEDIUM HAVE BEEN
POLISHED TO RA ≤ 0.5 µm



MANUFACTURED IN ACCORDANCE WITH CGMP, PED, ASME

ST

Tube in Tube Heat Exchangers

ST tube in tube heat exchangers find their application where fluids of high viscosity, density or high fibre or solid particle contamination are subjected to heat treatment, e.g. at waste water treatment plants.

The presence of different types of mechanical contamination causes their sedimentation on the walls, which blocks the flows in the exchanger. Large diameter of the ST exchanger tubes ensures their free flow and the dismountable design allows for mechanical cleaning of the heat exchange surface. Stainless steel make ensures corrosion resistance and the simple design ensures long-term failure-free operation.

APPLICATION

- sewage treatment plant
- · cooling and heating of wastewater sludge
- food and beverage industry
- paper industry
- chemical industry

WORKING PARAMETERS

- max. temperature up to: 230°F
- min. temperature up to: 32°F
- max. pressure:
 tube side: 232 psi
 shell side: 145 psi



DISMOUNTABLE DESIGN ALLOWS FOR MECHANICAL CLEANING





OPTION TO INCREASE HEAT EXCHANGE SURFACE





JAG SHIELD

Plate & Shell Heat Exchangers

The JAG SHIELD heat exchanger represents a new, revolutionary solution, ensuring not only increased flow turbulence, but also extensive heat exchange area.

APPLICATION

- refrigeration industry as evaporators and condensers
- vapour condensation
- · industrial cooling and heating systems
- oil coolers and heaters
- gas heaters and coolers
- CIP systems
- · systems with aggressive media
- suitable for chemical processes

WORKING PARAMETERS

- max. temperature: 390, 480, 570, 840°F
- min. temperature: -55°F
- · max. pressure: 230, 360, 580, 1450 psi
- · min. pressure: -14 psi



INNOVATIVE CORRUGATION DESIGN



UP TO 10% HIGHER HEAT TRANSFER EFFICIENCY



ENHANCED FLOW TURBULENCE



DECREASED FOULING

UP TO 10% LOWER PRESSURE DROP FOR HIGH FLOW PATTERN



INCREASED PLATE DURABILITY



INCREASED HEAT EXCHANGE AREA

TEMA

Heat Exchangers

We undertake complex and technologically challenging projects. Using state-of-the-art software, we are able to simulate any heat exchange process in order to find an optimal solution.

The heat exchangers we design and manufacture operate successfully at power plants, combined heat and power plants, industrial heating and cooling systems, cellulose plants, chemical plants, refinery plants and many others.

Advanced industrial technology and own device manufacturing guarantee high quality products. Experienced team of designers constantly works on designing state-of-the-art and efficient devices, adjusting them to customer requirements.

APPLICATION

- HVAC
- refrigeration
- food industry
- power industry
- sewage treatment plants
- chemical industry
- refining industry

WORKING PARAMETERS

- max. temperature up to: 1 650°F
- min. temperature up to: -325°F
- max. pressure: 6 960 psi
- · min. pressure: full vacuum



SPECIFICALLY ADDRESSING YOUR NEEDS



HIGHEST EFFICIENCY





CUSTOM DESIGN



WIDE RANGE OF APPLICATIONS



MADE OF THE BEST QUALITY MATERIALS



OWN DEVICE
- IN HOUSE



hexonic.com

Let's exchange