



Hexonic

HEAT EXCHANGERS



For over 30 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.



Plate Heat Exchangers

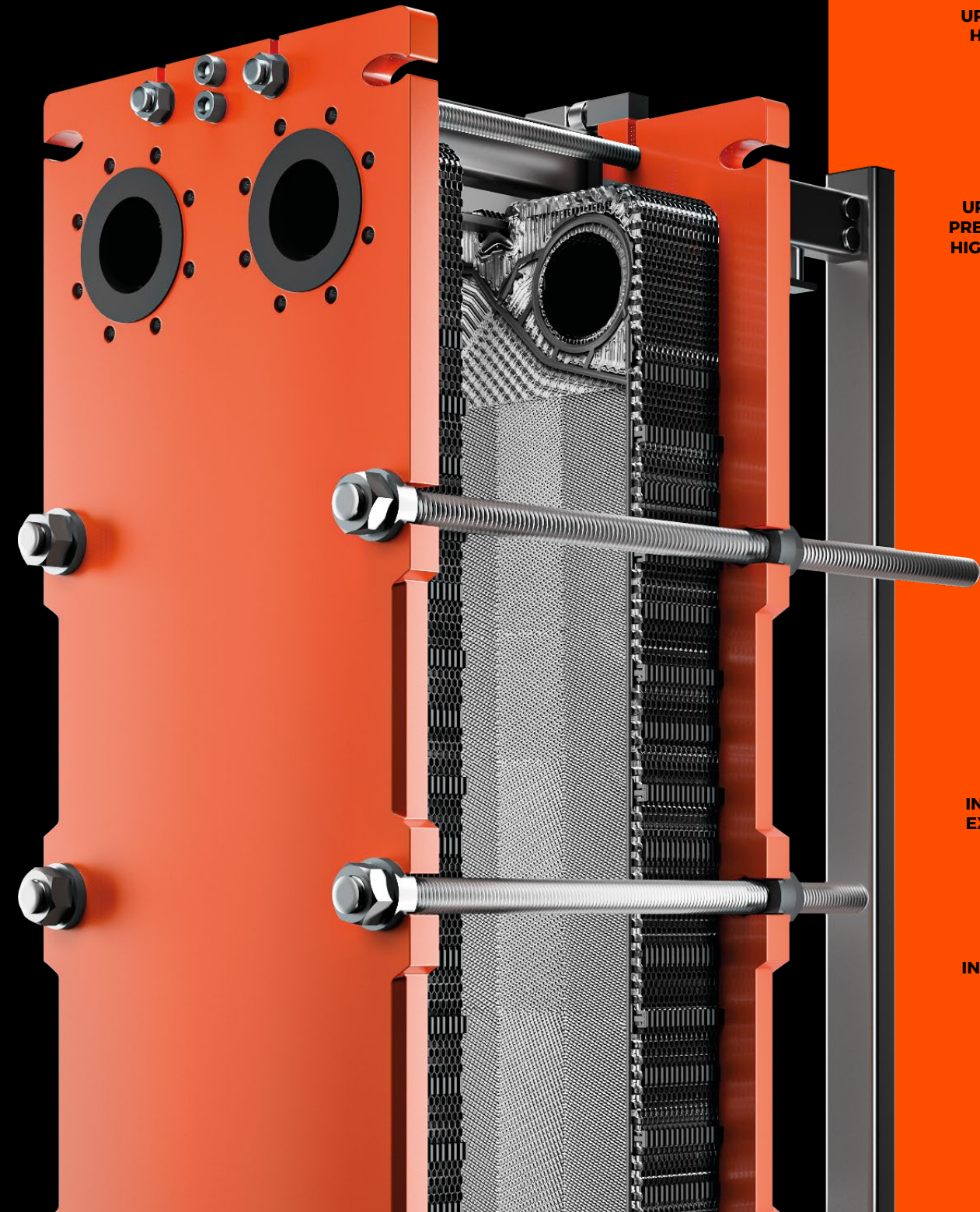
From the passion for innovation a new product has been born – JAG Plate Heat Exchanger with inventive jagged pattern of a heating plate. Breaking new ground solution brings not only enhanced flow turbulence but also increased heat exchange area. Together it gives more compact, lighter but most of all 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: 6, 10, 16, 25, 30 bar
- max. temperature: 170°C
- min. temperature: -20°C



ADVANTAGES



INNOVATIVE
CORRUGATION
DESIGN

10%
↑

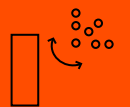
UP TO 10% HIGHER
HEAT TRANSFER
EFFICIENCY

10%
↓

UP TO 10% LOWER
PRESSURE DROP FOR
HIGH FLOW PATTERN



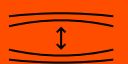
ENHANCED
FLOW
TURBULENCE



DECREASED
FOULING



INCREASED HEAT
EXCHANGE AREA



INCREASED PLATE
DURABILITY

L

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

WORKING PARAMETERS

- max. temperature: 230°C
- min. temperature: -195°C
- max. pressure: 30 bar



ADVANTAGES



HIGH HEAT
TRANSFER
COEFFICIENT



COMPACT SIZE



DOUBLE WALL
OPTION AVAILABLE



RESISTANCE TO HIGH
TEMPERATURE
AND PRESSURE



ASYMMETRIC
OPTION AVAILABLE



EASY ASSEMBLY
AND DISMANTLE

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: 200°C
- min. temperature: -195°C
- max. pressure: 20 bar



ADVANTAGES



STAINLESS BRAZING
ALLOWS HOMOGENEOUS
CONSTRUCTION



HIGH SANITARY
STANDARDS



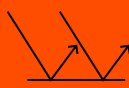
WIDE RANGE
OF APPLICATIONS



HIGH
DURABILITY



RESISTANCE TO HIGH
TEMPERATURE
AND PRESSURE



RESISTANCE
TO CORROSION

R

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: 150°C
- min. temperature: -195°C
- max. pressure: 45 bar



ADVANTAGES



**OUTSTANDING
RELIABILITY**



**OPTIMIZED
FOR MODERN
REFRIGERANTS**



**RESISTANCE
TO CYCLIC FATIGUE**



**RESISTANCE
TO FREEZING**



**SPECIAL CHANNEL PATTERN
ENSURES EFFECTIVE
EVAPORATION
OR CONDENSATION**

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: 165°C
- min. temperature up to: -20°C
- max. pressure: 16 bar



ADVANTAGES



HIGH
PERFORMANCE



OUTSTANDING
RELIABILITY



COMPATIBLE WITH
ALL TYPES OF
HEATING



EASY
INSTALLATION



COMPATIBLE WITH ALL
TYPES OF POOL
INSTALLATIONS

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: 200°C
- min. temperature up to: -20°C
- max. pressure:
shell side: 10 bar
tubes side: 16 bar



ADVANTAGES



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 JAD shell and tube heat exchangers make them perfect for the most demanding applications. Their sizes, compact in relation to the heat exchange area, and consequently the high performance as compared to the standard solutions, are appreciated by many installers and users. Made entirely of stainless steel, they offer a durable and sturdy design. Due to their design flexibility, they may become a part of most heat transfer systems.

APPLICATION

- heat exchange in industrial processes
- district heating substations
- ventilation systems
- air-conditioning systems
- heating systems
- chemical and food industry
- condensers
- evaporators
- economizers

WORKING PARAMETERS

- max. temperature up to: 250°C
- min. temperature up to: -20°C
- max. pressure:
tubes side: 35 bar
shell side: 16 bar



ADVANTAGES



**COMPACT
SIZE**



**LOW
MAINTENANCE
COSTS**



**HIGH
EFFICIENCY**



**WIDE RANGE
OF APPLICATIONS**



**MADE ACCORDING
TO PED AND ASME**



**VARIOUS
CONNECTION
ANGLES**

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

WORKING PARAMETERS

- max. temperature: 250°C
- min. temperature: -20°C
- max. pressure:
shell side: 16 bar
tubes side: 35 bar



ADVANTAGES



**COMPACT
SIZE**



**LARGE HEAT
EXCHANGE AREA**



**LOW
MAINTENANCE
COSTS**



**HIGH
PERFORMANCE**



**TURBULENT FLOW
PROMOTED BY
CORRUGATION
OF TUBES**



**VERTICAL INSTALLATION
REDUCES SPACE
REQUIREMENTS**



**WIDE RANGE
OF PRODUCTS**



**FACTORY-INSTALLED
INSULATION**

P-line

Shell & Coil Heat Exchangers

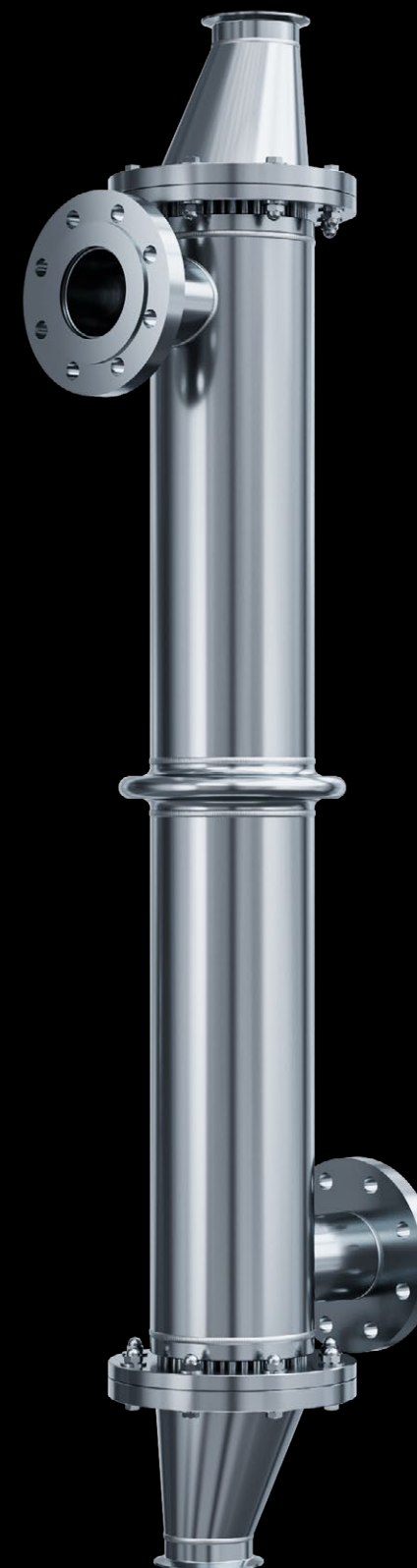
Hexonic P-line heat exchangers meet the challenges offered by the pharmaceutical industry. They also meet its restrictive hygienic standards imposed by inspection authorities and the industry. They were designed so to minimize the risk of contamination and ensure safe and sterile operation.

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: 140°C
 - shell: 200°C
- min. temperature up to: -25°C
- max. pressure: 10 bar



ADVANTAGES



DESIGNED TO
OPERATE IN
PHARMACEUTICAL
PRODUCTION



3-A CERTIFIED



MADE ENTIRELY
OF STAINLESS STEEL



ONE-, TWO-, AND
FOUR-PASS TYPES



HORIZONTAL AND
VERTICAL MODELS
AVAILABLE



SURFACES THAT COME INTO
CONTACT WITH PURE MEDI-
UM HAVE BEEN
POLISHED TO $RA \leq 0.5 \mu m$



MANUFACTURED IN
ACCORDANCE WITH
CCMP, PED, ASME

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.

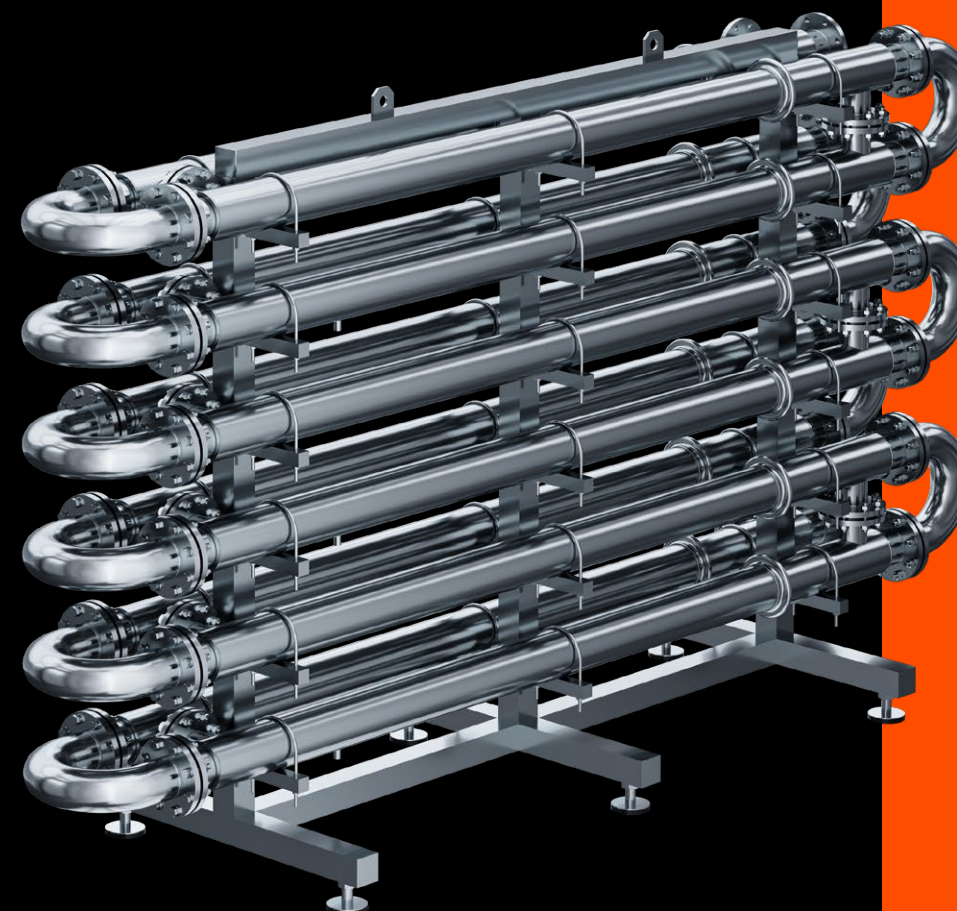
The presence of different types of mechanical contamination causes their sedimentation on the walls, which blocks the flows in the exchanger. Large diameter of the ST exchanger tubes ensures their free flow and the dismountable design allows for mechanical cleaning of the heat exchange surface. Stainless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

APPLICATION

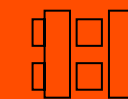
- sewage treatment plant
- cooling and heating of wastewater sludge
- food and beverage industry
- paper industry
- chemical industry

WORKING PARAMETERS

- max. temperature up to: 110°C
- min. temperature up to: 0°C
- max. pressure:
tube side: 16 bar
shell side: 10 bar



ADVANTAGES



**DISMOUNTABLE
DESIGN ALLOWS
FOR MECHANICAL
CLEANING**



**OPTION TO
INCREASE HEAT
EXCHANGE
SURFACE**



**RESISTANCE
TO CORROSION**



**WIDE RANGE OF
NOMINAL DIAMETERS
OF THE TUBES**

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: 200°C, 250°C, 300°C, 450°C
- min. temperature: -50°C
- max. pressure: 16, 25, 40, 60, 100 bar
(60, 100 bar non-openable shell only)
- min. pressure: -1 bar



ADVANTAGES



INNOVATIVE
CORRUGATION
DESIGN

10%
↑

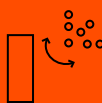
UP TO 10% HIGHER
HEAT TRANSFER
EFFICIENCY

10%
↓

UP TO 10% LOWER
PRESSURE DROP FOR
HIGH FLOW PATTERN



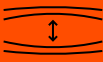
ENHANCED
FLOW
TURBULENCE



DECREASED
FOULING



INCREASED HEAT
EXCHANGE AREA



INCREASED PLATE
DURABILITY

DNA ECO

Economizers

DNA ECO represents a derivative product from well known and globally acclaimed heat exchanger DNA with helically shaped heating tubes. Recovery modular heat exchanger using new hexagonal DNA tubes represents next step in energy regeneration.

APPLICATION

- preheating of boiler feed water
- waste heat recovery
- cogeneration
- waste heat boilers
- heating and cooling systems
- industrial processes
- petrochemical industry
- food industry

TECHNICAL PARAMETERS

- shell side - flue gas side:
max. temperature: 250°C, 600°C
max. pressure: 0,5 bar
- tubes side - medium side:
max. temperature: 110°C, 200°C
max. pressure: 6 bar



ADVANTAGES



EFFECTIVE HEAT
TRANSFER AREA



TURBULENT
VORTEX FLOW



MODULAR DESIGN



PROFITABILITY OF
AN INVESTMENT



HIGH
PERFORMANCE



LOW CO₂ EMISSION



HIGH MECHANICAL
RESISTANCE



HIGH HEAT
TRANSFER RATES



LOW
PRESSURE DROP

Dry Coolers

Dry coolers are used to cool industrial systems, as well as industrial and commercial facilities.

The process consists in dumping excess heat to the environment, if its utilization is not economically justifiable. They operate by cooling the fluid passing through the tubes inside the finned heat exchanger with fans-generated air flow.

Fluid cooling using dry coolers is the cheapest method for dispersing waste heat, as they reach high performance at minimum power consumption.

APPLICATION

- data centre cooling systems
- heat and power plants
- industrial processes
- renewable energy
- biogas plants
- large volume air-conditioning systems

WORKING PARAMETERS

- max. temperature up to: 100°C
- min. temperature up to: -20°C
- max. pressure: 10 bar



ADVANTAGES



**EFFICIENT
COOLING
METHOD**



**HIGH PERFORMANCE
AT MINIMUM POWER
CONSUMPTION**



**CLOSED-CIRCUIT
SYSTEM
OPERATION**



**SUITED TO
VARIOUS MEDIA**



**HIGH DURABILITY OF THE
KEY COMPONENTS**



**AVAILABLE IN THREE
COLOR
VERSIONS**



**LOW NOISE LEVEL
STARTING
FROM <40 DB**

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: 900°C
- min. temperature up to: -198°C
- max. pressure: 480 bar
- min. pressure: full vacuum



ADVANTAGES



**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**