Hexonic | HEAT EXCHANGERS

# INDUSTRIAL HEAT EXCHANGERS

# TEMA

# FOR OVER 30 YEARS WE HAVE BEEN IMPROVING OUR PRODUCTS TO GIVE YOU THE CERTAINTY **THAT YOU'VE MADE THE BEST CHOICE**.

## OUR STORY

Since 1988, we've been inspiring people to spare our planet's resources through effective heat exchange. Our reliable heat exchangers improve the performance of systems. Our innovative approach, combined with our engineers' passion, enables our customers around the world to reduce costs, save time and make a difference for the environment. Their satisfaction is our pride and an acknowledgment of our brand's quality.

## OUR COMMITMENT

Our priority commitment is to design the most efficient heat exchange solutions. With this approach, we are confident to provide our customers with optimum care each time, offering high quality products and structural solutions.

Hexonic, with its headquarter in Poland, has a worldwide presence through its subsidiaries and over 500 distributors worldwide.

# INDIVIDUAL APPROACH

Each individual project requires an individual approach, starting from preparing the offer drafting stage, right up to project implementation, purchase of materials, planning, production and delivery to the customer. Every project is different and therefore requires unconventional actions and a focus on responsibility and competence at every stage. At the Industrial Heat Exchangers Business Unit, all this is available in one place. This enables us to develop this team, to ensure professional, quick and efficient response to the needs of customers and the market.

## ADVANTAGES

EXPERIENCED TEAM OF PROCESS ENGINEERS DELIVER OPTIMAL SOLUTIONS

A QUALIFIED TEAM OF ENGINEERS ENSURE THAT DOCUMENTATION IS COMPLIANT WITH THE APPLICABLE PRESSURE EQUIPMENT REGULATIONS

ABILITY TO MANUFACTURE PROCESS PIPES WITH WELD SEAM

A FLEXIBLE ROBOTIC WELDING SYSTEM FOR WELD OVERLAY CLADDING (TUBE SHEETS UP TO 1800 MM)

ORBITAL WELDING OF PROCESS PIPES

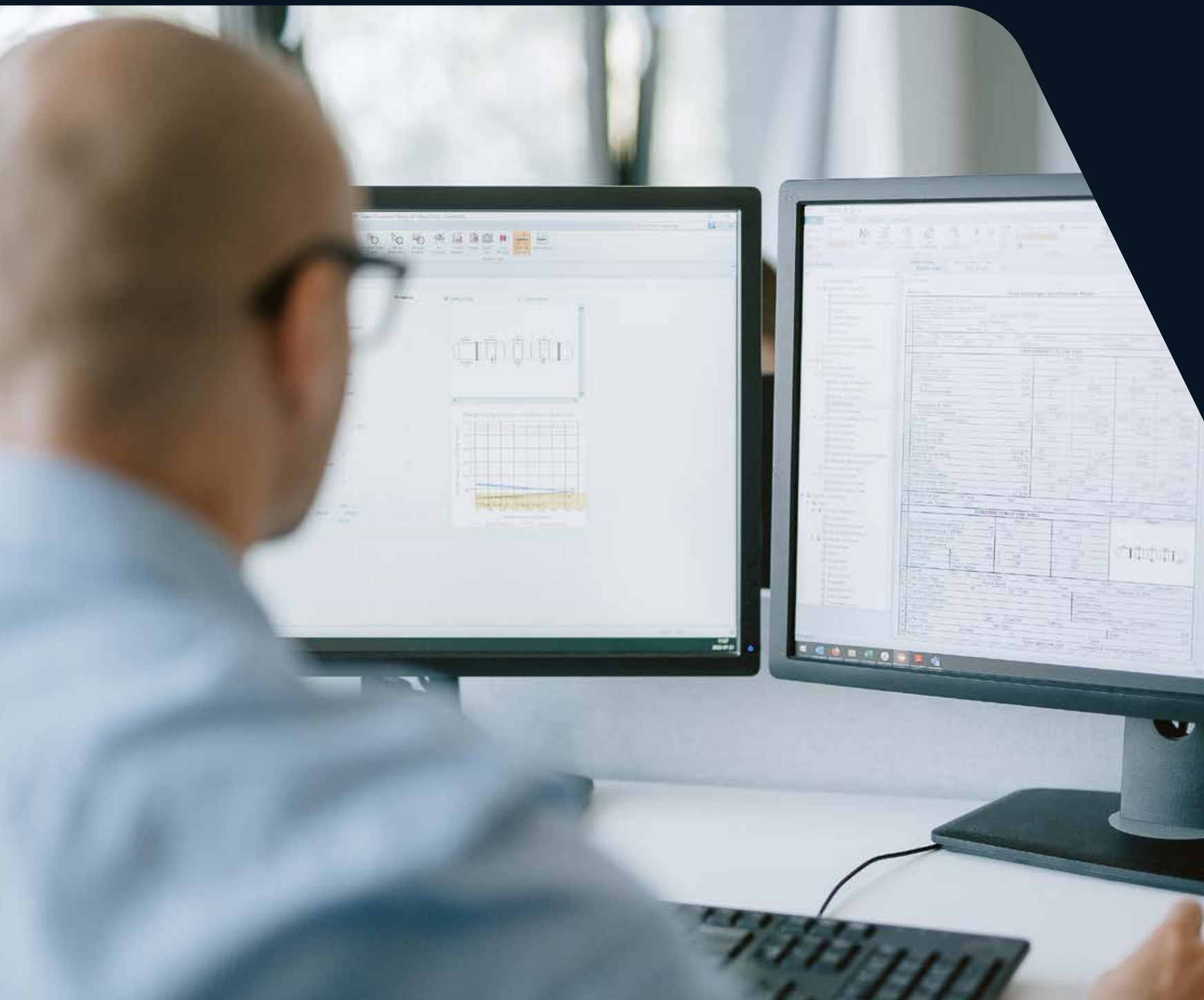
EXPERIENCED PRODUCTION TEAM

MODERN MACHINE PARK

HIGH QUALITY

ON-TIME DELIVERY

# SELECTION



## WE DO NOT SHY AWAY FROM COMPLEX AND TECHNOLOGICALLY CHALLENGING PROJECTS.

Using state-of-the-art software, we are able to simulate any heat exchange process in order to find the optimal solution. The heat exchangers we design and manufacture operate successfully at power plants, combined heat and power plants, in industrial heating and cooling systems, cellulose plants, chemical plants, refineries and many others.

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

# DESIGNING

Hexonic’s experienced team of engineers drafts the detailed design and accompanying calculations, such as thermodynamic calculations and tube bundle vibration analysis using AspenTech ONE, perform strength calculations with Visual Vessel Design and computational flow analysis (Computational Fluid Dynamics).

# QUALITY CONTROL

The quality of our products is confirmed by certificates and approvals awarded by renowned and accredited Notified Bodies, such as:

- **UDT**
- **LLOYD'S REGISTER**
- **TÜV NORD**
- **DET NORSKE VERITAS** (DNV)
- **NATIONAL BOARD**

## WE CONDUCT QUALITY CHECKS OF OUR PRODUCTS WITH SPECIAL DILIGENCE.

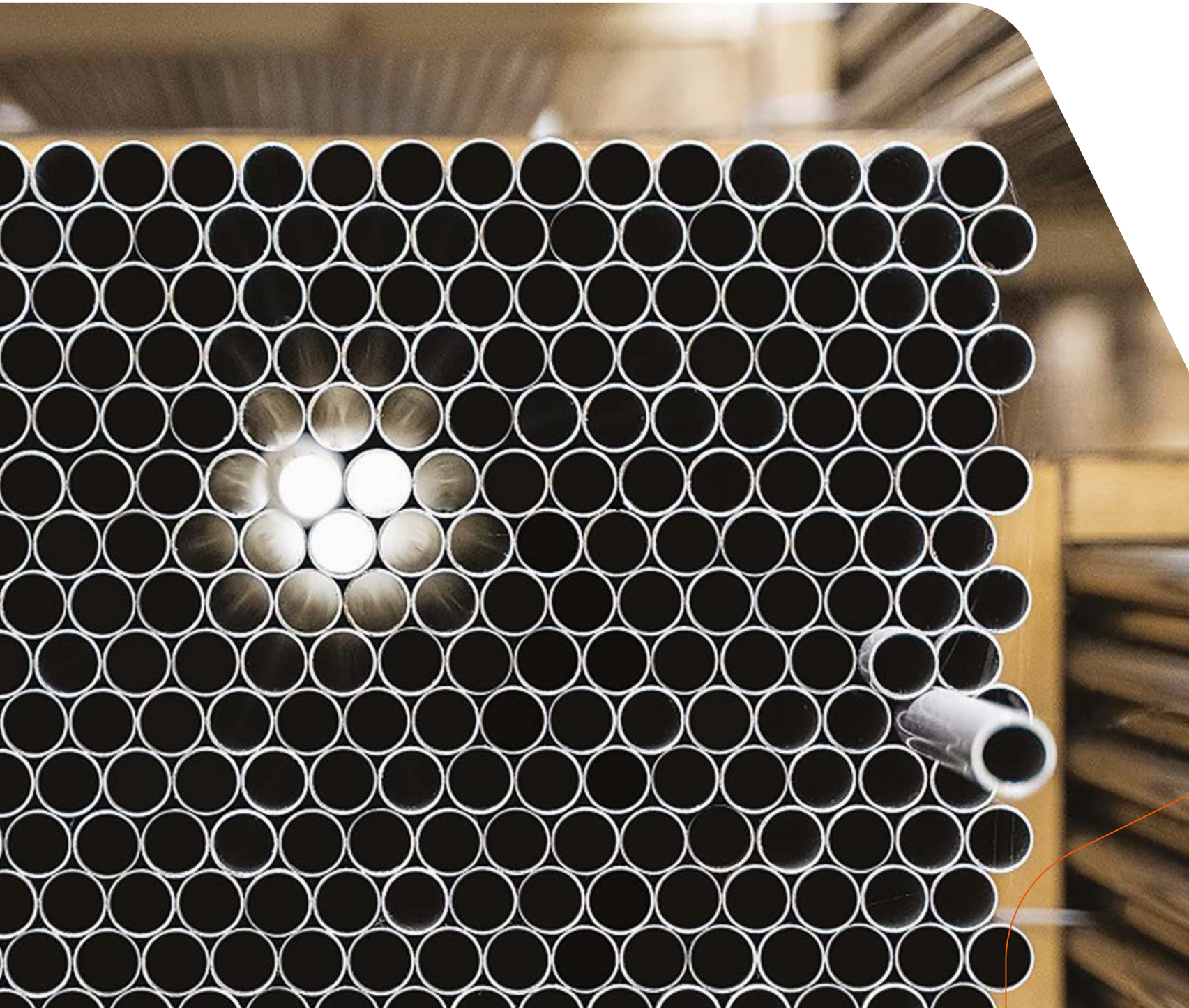
An experienced team of internal inspectors conducts nondestructive and destructive testing, such as dye penetrant inspection (PT), eddy-current testing (ET), visual testing (VT), surface roughness testing, macroscopic testing, analyzing metal chemical composition (PMI testing), hardness testing (HT).

We commission an X-ray examination (RT), ultrasound testing (UT), impact testing and magnetic-particle testing (MT) to leading research laboratories.

### CERTIFICATES

- **ASME U, UM**
- **PED 2014/68/EU**
- **CHINA ML**
- **ISO 9001**
- **ISO 3834-2**
- **3-A**
- **EAC**
- **NB**

# MATERIALS



- CARBON STEEL
- STAINLESS STEEL
- DUPLEX STEEL
- TITANIUM
- MONEL
- COPPER
- INCOLLOY
- OTHER

## THE SKY’S THE LIMIT

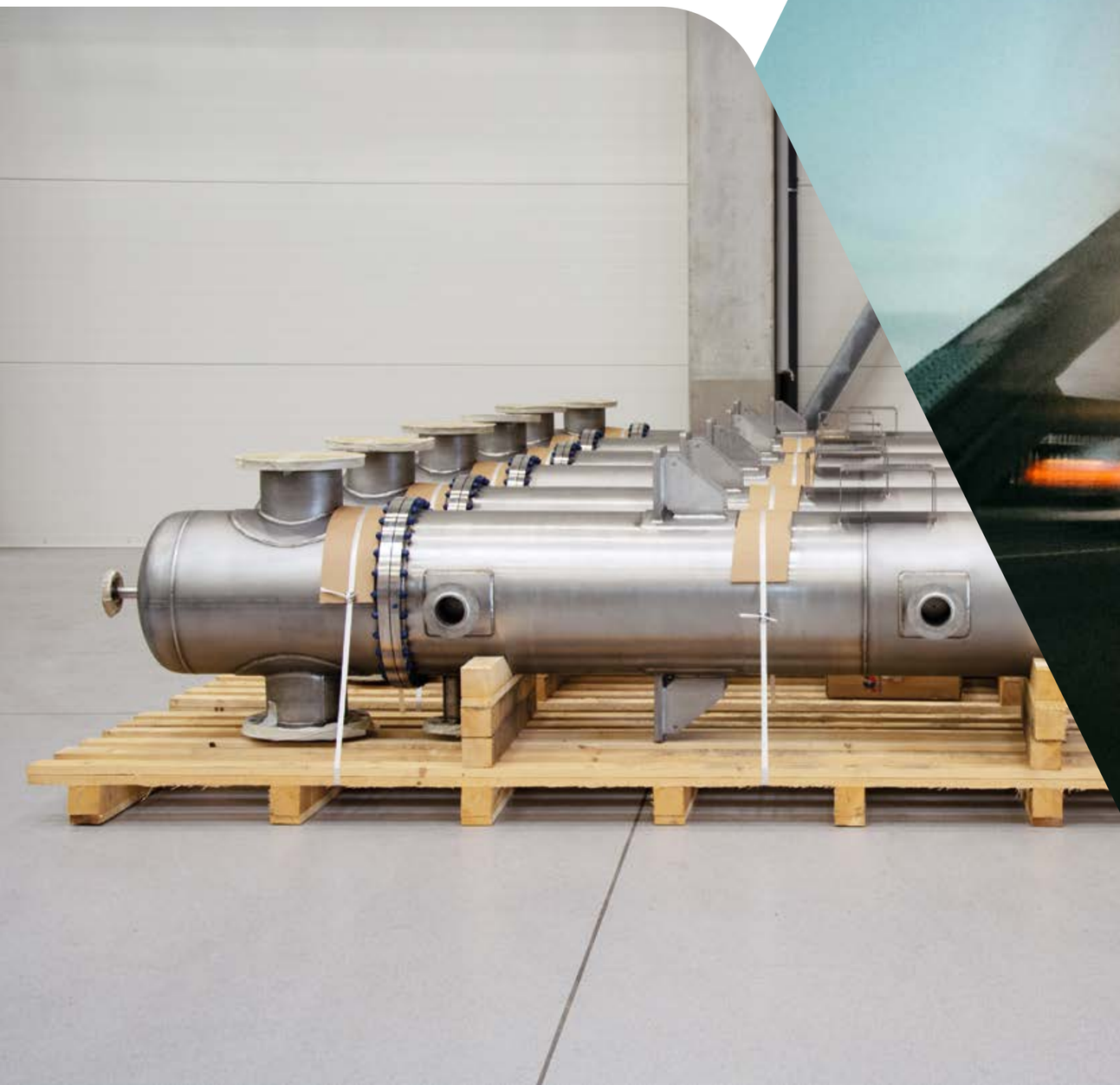
We are ready for any challenge. We can manufacture a heat exchanger from any steel available on the market.

# PRODUCTION

TECHNOLOGICALLY ADVANCED MACHINE STOCK, MANY YEARS OF EXPERIENCE AND RELIABLE MATERIAL SUPPLIERS ALLOW FOR EXCHANGER MANUFACTURING AT THE HIGHEST LEVEL.

WE MANUFACTURE STEAM CONDENSERS, PROCESS LIQUID / GAS HEATERS AND COOLERS, CONTAINERS AND OTHERS.

# DELIVERY



PROPERLY PREPARED
AND SECURED DEVICES START
THEIR JOURNEY TO CUSTOMERS
AROUND THE WORLD.

# PRODUCTION CAPABILITIES

PRODUCTION HALL

4500 $m^2$

MAXIMUM SHELL DIAMETER

5500 mm

MAXIMUM LENGTH OF THE DEVICE

30000 mm

MAXIMUM WEIGHT OF A SINGLE DEVICE

120 t

# REALIZED PROJECTS

## POWER INDUSTRY

**MAX. TEMPERATURE**
TUBES SIDE — 200°C
SHELL SIDE — 200°C

**MAX. PRESSURE**
TUBES SIDE — 49 BAR
SHELL SIDE — 3 BAR

**WEIGHT** — 5 600 kg
**HEAT TRANSFER AREA** — 80 m²
**MATERIAL** — 1.4541(321)/P265GH

**MAX. TEMPERATURE**
TUBES SIDE — 150°C
SHELL SIDE — 300°C

**MAX. PRESSURE**
TUBES SIDE — 20 BAR
SHELL SIDE — 5 BAR

**WEIGHT** — 60 000 kg
**HEAT TRANSFER AREA** — 3 092 m²
**MATERIAL** — 1.4307(304L)/P265GH

## REFRIGERATION

**MAX. TEMPERATURE**
TUBES SIDE — 60°C
SHELL SIDE — 60°C

**MAX. PRESSURE**
TUBES SIDE — 10 BAR
SHELL SIDE — 11 BAR

**WEIGHT** — 4 500 kg
**HEAT TRANSFER AREA** — 310 m²
**MATERIAL** — 1.4462(S32205)/P265GH

**MAX. TEMPERATURE**
TUBES SIDE — 61°C
SHELL SIDE — 88°C

**MAX. PRESSURE**
TUBES SIDE — 10 BAR
SHELL SIDE — 11 BAR

**WEIGHT** — 5 450 kg
**HEAT TRANSFER AREA** — 440 m²
**MATERIAL** — 1.4462(S32205)/P265GH

# REFINING INDUSTRY

**MAX. TEMPERATURE**
TUBES SIDE — 210°C
SHELL SIDE — 260°C

**MAX. PRESSURE**
TUBES SIDE — 8 BAR
SHELL SIDE — 10 BAR

**WEIGHT** — 9 780 kg
**HEAT TRANSFER AREA** — 410 m²
**MATERIAL** — 1.4404(316L)/P295GH

**MAX. TEMPERATURE**
TUBES SIDE — 200°C
SHELL SIDE — 200°C

**MAX. PRESSURE**
TUBES SIDE — 16 BAR
SHELL SIDE — 16 BAR

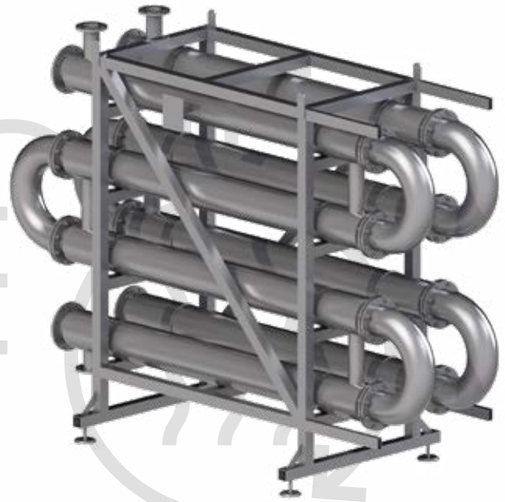
**WEIGHT** — 9 145 / 4 020 kg
**HEAT TRANSFER AREA** — 156 / 54 m²
**MATERIAL** — P265GH

# SEWAGE TREATMENT PLANTS

**MAX. TEMPERATURE**
TUBES SIDE — 80°C
SHELL SIDE — 80°C

**MAX. PRESSURE**
TUBES SIDE — 8 BAR
SHELL SIDE — 8 BAR

**WEIGHT** — 1 405 kg
**HEAT TRANSFER AREA** — 19 m²
**MATERIAL** — 1.4404(316L)/1.4307 (304L)



**MAX. TEMPERATURE**
TUBES SIDE — 80°C
SHELL SIDE — 80°C

**MAX. PRESSURE**
TUBES SIDE — 8 BAR
SHELL SIDE — 8 BAR

**WEIGHT** — 1 405 kg
**HEAT TRANSFER AREA** — 19 m²
**MATERIAL** — 1.4404(316L)/1.4307(304L)

# CHEMICAL INDUSTRY

**MAX. TEMPERATURE**
TUBES SIDE — 100°C
SHELL SIDE — 175°C

**MAX. PRESSURE**
TUBES SIDE — 8 BAR
SHELL SIDE — 6 BAR

**WEIGHT** — 645 kg
**HEAT TRANSFER AREA** — 25 m²
**MATERIAL** — 2.4858 (INCOLOY 825)

**MAX. TEMPERATURE**
TUBES SIDE — 320°C
SHELL SIDE — 600°C

**MAX. PRESSURE**
TUBES SIDE — 60 BAR
SHELL SIDE — 0,5 BAR

**WEIGHT** — 20 250 kg
**HEAT TRANSFER AREA** — 690 m²
**MATERIAL** — 1.7380 (10CRMO9-10)



# PULP AND PAPER INDUSTRY

**MAX. TEMPERATURE**
TUBES SIDE — 200°C
SHELL SIDE — 200°C

**MAX. PRESSURE**
TUBES SIDE — 12 BAR
SHELL SIDE — 12 BAR

**WEIGHT** — 8 600 KG
**HEAT TRANSFER AREA** — 140 m²
**MATERIAL** — 1.4404(316L)/P265GH

**MAX. TEMPERATURE**
TUBES SIDE — 220°C
SHELL SIDE — 220°C

**MAX. PRESSURE**
TUBES SIDE — 25 BAR
SHELL SIDE — 16 BAR

**WEIGHT** — 2 835 kg
**HEAT TRANSFER AREA** — 96 m²
**MATERIAL** — 1.4462(S32205)

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