

# We exchange heat since 1983



66

We've been exchanging heat for 40 years

#### **INDICE**

| ABOUTUS           | 04 |
|-------------------|----|
| OUR TEAM          | 08 |
| CERTIFICATES      | 10 |
| CUSTOMER SERVICES | 12 |
| PRODUCTS          | 16 |
| LOGISTICS         | 22 |
| CUSTOMERS         | 23 |



# Enthusiasm and Determination

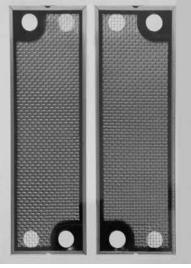
#### **OUR STORY AND IDEA**

Techno System was born in 1983 after a patent obtained in 1982. Since then the company designs, manufactures, tests and sells plate heat exchangers all over the world. After the prototype of the first plate exchanger, with the now legendary name of TS 500, the company continued to innovate and expand in this sector, becoming a recognized leader. Carlo Boccacci's brilliant idea, thanks also to his great enthusiasm and will, actually proved successful.

#### CHANCE AND KNOWLEDGE

It often happens: everything can seem random. In any case, Carlo Boccacci, while he was an engineering student, refused to make his own a project for a shell and tube heat exchanger. But another chance came after the first one, as he says: "At work, we made cutters and tools for wood, but I once again came across a brochure of plate exchangers. Therefore, working in a sector that was completely unknown to me, I designed (with the proper knowledge) and created a plate exchanger, without having had any presses or molds at my disposal. That really gave me the push to try".







# ALWAYS AT THE CUTTING EDGE

#### Vision

"Helping to create better conditions for people everyday, through ever more efficient solutions in the field of heat exchange and according to sustainable development goals for environment"



#### INTERNATIONAL PLACEMENT FROM THE BEGINNING

After founding Techno System, bit of "recklessness" brought Carlo Boccacci and two other colleagues to the rental of the first office of 150 m2. Things weren't easy right away, as in any start up. A tough start, like a complete unknown, while large international companies from Northern Europe already ruled the market. A constant battle royal where every profit always became invested in the project.

#### ALWAYS AT THE CUTTING EDGE IN THE MARKET

Heat exchange was and always will be a purely technical market. Our field is very competitive but Techno System showed in time to be a leader, with its good products, knowledge, experience and procedures. Working with heat, in a manner of speaking, isn't within everyone's reach and this has favored and still favors Techno System which has always proven to be up to the task.





#### BETWEEN THE FIRST IN THE WORLD

During its second time attending at the 1986 Milan International Fair, Techno System's small stand, was visited by the biggest market players who immediately noticed the innovations presented: non-glued gaskets, possibility of optimizing the flow rates in each circuits and very high operating pressures. The compliments received were certainly the first acknowledgement of the value of our plate exchangers.

#### **OUR NUMBERS**



30 Countries

we export to over 30 countries around the world



+ 2000

customers around the world



+1800

plate exchangers produced per year



+3.000.000

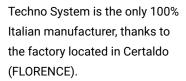
plates installed

#### IMPLEMENTATION OF THE "LEAN MANUFACTURING" METHOD

In 2019, Techno System embraced the "Lean Manufacturing" method, increasing even more customer satisfaction: boosted accuracy of scheduled delivery times and further improvement in quality. This methodology also incurs an improvement of everything related to production, including for example a better and safer working environment.

#### Highlights

#### Made in Italy



#### Customization

Design according to international standards (PED, AMSE, BS, etc.).

#### Certifications

Techno System has received ISO9001 and PED Mod. H1 certificates since 2002.

#### Customer services

Working with Lean methodology, we guarantee prompt feedbacks and delivery times.

# Looking at to the future with resolve

Great goals can only be achieved with a unique and special staff.





Carlo Boccacci
Board President



Simona Boccacci
Board Member and Quality



Marco Bartolini Technical Dept



Massimiliano Paniccià Technical Dept



Laura Rosi
Accounting Dept Manager



Maria Rosaria Carfora Accounting and Logistics Dept



Duccio Corbinelli Sales Dept Manager



Silvia Renieri Sales Dept



Alessandro Tendi Production Dept

# Safety and Quality our top priority

All Techno System exchangers and products are built and certified according to PED (2014/68/EU), European Directive regarding pressure equipments. Techno System, thanks to the ISO 9001:2015 certification and the procedure approved by DNV, obtained (see certificate) PED Module H1, meaning it can design, build and test plate exchangers and assemblies up to the maximum risk category IV without third parties involved (only for category IV still requires approval of the project).

#### NEW TESTING ROOM Where the performance of our products is verified and improved.

A dedicated area within our factory where we carry out all thermodynamic and fluid dynamic measurements, thanks to latest generation equipment and measuring instruments certified by external bodies. In this way, we assure full compliance with the specifications on the declared values of heat exchanged, total pressure drops and all other measurable parameters. A further added value for Techno System to guarantee its customers absolute accuracy on energy recovery, industrial cooling and system sizing values.











#### ISO 9001:2015

Our company has been certified ISO 9001.
Thanks to this certification we guarantee a manufacturing process for our products that complies with the best quality standards.
Our solutions are always cutting-edge from a product quality the point of view of product quality, and our internal processes guarantees total traceability even for exchangers supplied in the 1980s.



#### PED 2014/68/EU

PED is the European Pressure Equipment
Directive 2014/68/EU. Pressure equipment, with
an operating pressure greater than 0.5 bar, falls
within the scope of the directive and, in some
instances, CE marking can be mandatory by law.
This includes equipment such as (steam) boilers,
pressure vessels, heat exchangers, piping,
pressure cookers, etc. If the pressure equipment
meets the requirements of the PED, the CE
marking can be applied and the equipment can
be freely traded throughout the European market.
In particular:

- Module H Conformity based on guarantee of total quality.
- Module H1 Compliance based on guarantee of total quality with control of the design.

#### Customer services

# CUSTOMER, first

Giving our best to help the customer

#### O ADVISING

One of our added values is to share technical knowledge and massive experience with our partner and customers. We often advise our partners whenever it might be useful to share specific technical features or to recommend solutions based on experience acquired over decades of activity corporate. Thanks to our qualified and experienced staff we can advise you in the best way about the possible and most advanced solutions in the market.



#### O2 OUR APP

Free download in 5 languages, both from Google Play for Android devices and from the App Store for IOS devices. It provides quick sizing of the exchangers based upon standardized thermal programs for the different HVAC sector applications such as heating, DHW production, swimming pool heating. In addition to the main calculation function it is equipped with interesting tools for users.



#### ONLINE CALCULATION SOFTWARE

The software is available online and allows you to do customized calculations, changing all possible parameters to obtain excellent results.

CUSTOM DESIGN

Thanks to the constant presence of our engineers, we can offer you fast and very professional support to customize and study the most suitable solutions, case by case. Trust our team, they will constantly support you, offering you competence, skills and human touch.



# A simple rule

66

INNOVATE, Standing still does not allow us to survive market evolution

OUR PLATE EXCHANGERS, INTENDED FOR:

# INDUSTRY HVAC DISTRICT HEATING DHV SPORT CENTERS FOOD



#### Our Products

#### Our PLATE HEAT EXCHANGERS

#### THE STATE OF THE ART

Gasketed plate heat exchangers are the core product of the company, with 24 months warranty terms instead of 12 usually provided for by current laws. Born for the pasteurization of milk, for which they are still used, PHEs have long been employed in many applications and for almost any fluid.

Their "secret" is the high turbulence generated within the circuits; this allows to significantly increase the efficiency of heat exchange, therefore providing equipment



much more compact and cheaper than other types of exchangers.

#### PASTEURIZATION FOR THE HOT AND COLD FOOD INDUSTRY IN A SINGLE EQUIPMENT

Plate exchangers and multisection pasteurizers for the food industry are used for the thermal treatment of fluids such as milk, beer and fruit juices. For this reason they are entirely made of stainless steel in order to guarantee the most complete hygiene of the processes. Pasteurizers are devices that allow the bacterial load to be eliminated by bringing the circulating fluid to the temperature required by the process. Their peculiarity lies in having combined circuits which allows maximum recovery of the heat in the next cooling section.





#### DHW PRODUCTION AND POOL HEATING MODULES. FOR TAILORED COMFORT

FOR TAILORED COMFORT

With its domestic hot water and swimming pool heating production modules, Techno System offers a "plug&play" solution to designer engineers and installers companies. The MD modules guarantee excellent adjustment comfort and accuracy of the temperature thanks to the system made of probes and 3-way mixing valve with electronically regulated actuator. They are also equipped with the anti-legionella function. The electronic regulator can also be controlled remotely with a ModBus interface. Even the new ML modules, extremely simple and economical, they are equipped with the anti-legionella function for the elimination of bacteria and viruses present in pipes and in storage systems. The ML module is also suitable for swimming pool heating allowing for quick and efficient installation and a fast and comfortable heating.



#### DISTRICT HEATING SUBSTATIONS

A FUNDAMENTAL INTERFACE

Skid-based or wall-mounted substations are equipment that connects the user with the network distribution of heat, produced in a distant power plant. This type of substations, completely pre-wired and customizable, allows you to adjust temperature and power delivered to the user circuit (secondary side), through a regulator installed in the electrical control panel. The substations come with all the control and safety equipment required by law.

#### Our Products

### ANTI LEGIONELLA SOLUTIONS

In some sectors the risk of legionella is widespread. In particular, the managers of all public or private structures that use domestic hot water, especially where weakened or elderly people are, such as hospitals, retirement homes but also hotels, spas, sports centers and blocks of flats with a centralized DHW system should provide for the prevention of risks from legionella.

Its spread can be countered with thermal treatment cycles of the water as, at a temperature of 70°C, there is complete and immediate elimination of these bacteria.



#### ECONOMIC SOLUTIONS FOR HYGIENE AND HEALTH

Techno System has the safest, easiest and cheapest solution for systems with:

INSTANT PRODUCTION = MDI and MDI.M Modules

Certified as class I medical devices
AD ACCUMULATION TANKS = ML Modules



These modules are designed to ensure:



SAFETY FOR THE USERS



NO DAMAGE TO THE PIPES



COST-SAVINGS SOLUTION

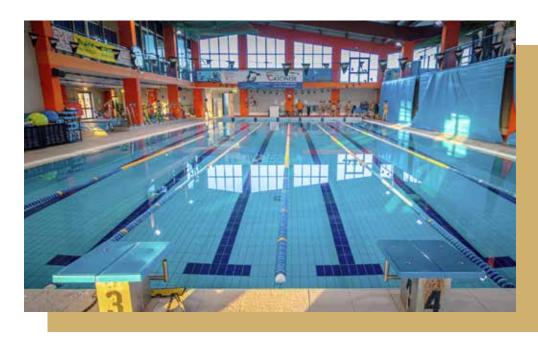


#### ENERGY RECOVERY SOLUTIONS

The MR recovery modules were designed and developed by Techno System to recover heat from the waste water of industrial or civil processes and transfer it to the renewal water.

MR modules are therefore used in all systems where energy can be recovered in the form of heat such as swimming pools, wellness centres, industrial laundries, paper mills, tanneries and sports facilities.

This system allows you to recover up to 90% of the energy, returning the make-up water only 2°C colder than the waste water.



Cascina swimming pool (PI)
Installation of energy recovery system

# CUSTOMIZED PRODUCTS

One of the strengths of Techno System is the ability to create customized products according to customer needs.



Design/Co-design and technical verification



2D or 3D designs available in short times.



Special connections, materials or paintwork.



OIL COOLING **SKID**WITH DOUBLE EXCHANGER

#### Logistics

# WE EXCHANGE HEAT, ALL OVER THE WORLD



#### CERTALDO AND TUSCANY a historic territorial luxury

Certaldo and Tuscany are an important starting point for the company. Tuscany in the world has always evoked history, culture, the beauty of the cities and territory. This has often been passed to the art and products of this Region. Techno System also tries to make the best use of this beauty and to transfer it, for the benefit of customers, into its own projects and products.



#### Our experience told by our Customers

Over the years we have offered solutions to many customers. In 40 years of growth we can be proud to have worked for:







































































www.techno-system.it sales@techno-system.it Tel. +39 0571 667229

Techno System srl Via Toscana, 160 - 50052 Certaldo (FI) Italia