Company Profile

Creativity, technological innovation and focus on research are the key principles that guide us in offering sustainable comfort for the wellness of people, putting environment and sustainability first.

Thermocold®
THE AIRVOLUTION

About us

Thermocold has been on the worldwide market since 1995 with innovative and highly efficient solutions for air conditioning in residential, commercial and industrial applications, oriented towards energy saving and environment protection.

Our mission is the foundation of everything we do...
We create sustainable comfort providing solutions for summer and winter air conditioning.
We want to secure a green future for next generations reducing energy consumption and CO_2 emissions in buildings.

A long and solid history of innovation and sustainability

The history of the Thermocold brand begins in **1995** from the partnership between entrepreneurs from Veneto and Bari: together they lay the foundations for a common project born with the ambitious goal of creating sustainable comfort for people in all the spaces of residential, commercial and industrial fields. Thermocold has always turned its attention in increasing technical skills and know-how due to develop innovative products designed for the customer needs and applications and strongly oriented towards energy saving and environmental protection.

Thanks to the professional background of the new team, coming from the most qualified Italian companies, strategies and huge investments are planned to equip the production structure with the most advanced production and testing systems.

The dynamic and highly competitive company is the first to offer on the European market a complete range of chillers and heat pumps with capacity range up to 100 kW equipped with scroll compressors. Thanks to continuous investment in the Research & Development department, the company obtains numerous patents since **1996** in then, expanding the product portfolio with great attention to creating value for the customer.

In **2017** Thermocold joined the Ingersoll Rand family, an American multinational group that excels in creating solutions for improving the quality and climatic comfort in residential and industrial buildings. The acquisition is based on the sharing of values, principles and strategies and aims to strengthen the product portfolio in order to exploit the big market opportunities in Europe and in other parts of the world where demand is growing rapidly.

Trane Technologies was born in **2019** from the spin-off of the Climate division of Ingersoll-Rand, to which Thermocold belongs as a portfolio brand, and establishes principles, sustainability objectives and strategies that aim to create a sustainable future for our planet.

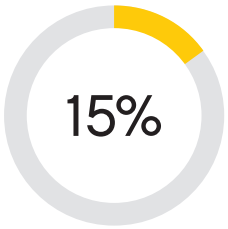
With this important step, Thermocold welcomes the great challenges of eco-sustainable design, starting the conversion of the whole products portfolio from R410a to R454B, the new future-proofness low GWP refrigerant, aligning itself with the sustainability standards required by the regulations in force since 2025.

Our contribution for environment is important

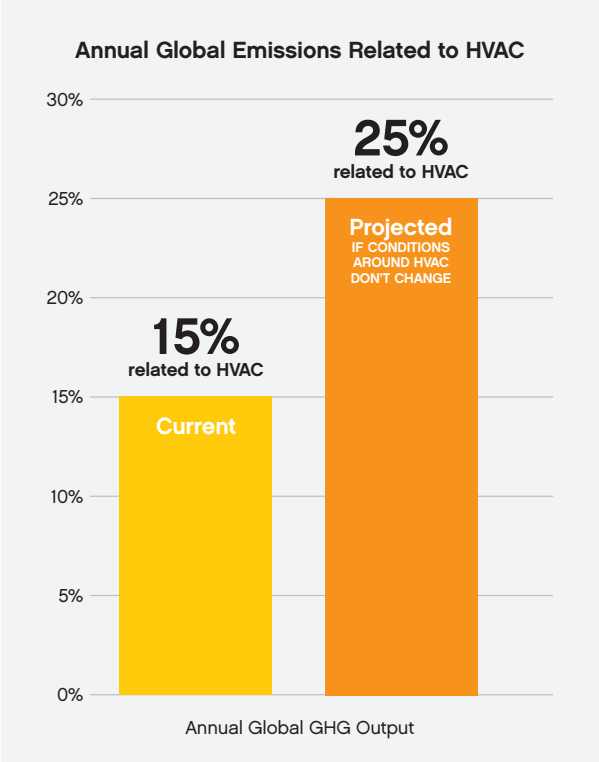
The industrialized world has been enjoying the benefits of air conditioning for roughly a century. Air conditioners in buildings are expected to number 5.6 billion by 2050, growing their share of global annual emissions from 15% to 25%.

If developing countries embrace inefficient, inexpensive cooling systems that rely on high-GWP (global warming potential) refrigerants, as they modernize, the carbon emissions related to HVAC could dramatically increase the world's annual output.

By actively promoting the development, commercialization and adoption of environmentally friendly alternatives to high-GWP refrigerants for all affected industrial sectors, a gradual reduction in the production and consumption of refrigerant gases is expected with a large gain in energy efficiency in cooling and a doubling of the expected CO_2 savings, capable of avoiding up to 1°C of global warming.



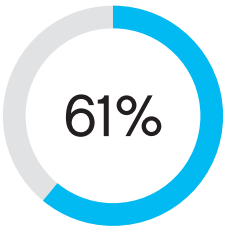
related to HVAC



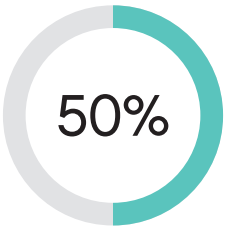
Effectively managed internal sustainability initiatives can offer substantial business benefits beyond the purely environmental, such as:

- Enhanced profitability from gains in efficiency.
- Resilience against future regulatory issues
- Improved employee engagement and participation in sustainability efforts.
- Working toward achieving carbon neutrality, which will soon be a key competitive advantage.
- Opportunities to explore new eco-friendly areas of business.

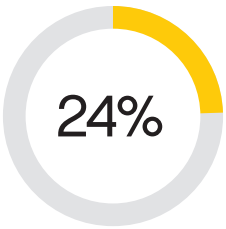
Sustainable business practices are no longer optional for companies that plan to exist beyond the near future: they are essential.



Reduction in the greenhouse gas refrigerant footprint of our product portfolio.



reduction of greenhouse gas emissions intensity of our operations since our 2013 baseline.



increase in our total energy efficiency in 2019 compared to our 2013 baseline.

We believe in a sustainable future

What we make today builds our tomorrow. Our actions are driven by bold goals: with electrified solutions for heating we aim at reduce the carbon footprint by 2030 of a gigaton of CO_2 that is of one billion tons of carbon emissions, related to the use of our products.
This amount would correspond to 2% of global annual emissions or at annual issues of Italy, France and the United Kingdom United put together.

2030 GOALS

- Reduction of energy consumption.
- Reduction of greenhouse gas emissions.
- Use of renewable energy sources.
- Use of green technologies.
- Switch to low GWP refrigerants.

Our principles guide business decisions and strategies for employee welfare and regulate interactions with customers and suppliers.

- Today's work contributes to the development of a "sustainable" tomorrow
- Customer wellbeing is at the heart of every our decision
- Including and uplifting people and communities are what count for us
- We always make better happens
- Motivation and the courage to dare allow everyone to do their own job in a different way
- The worker is responsible for his own actions and keeps ownership of his decisions
- Everyone is empowered to take action by doing what is right in any time

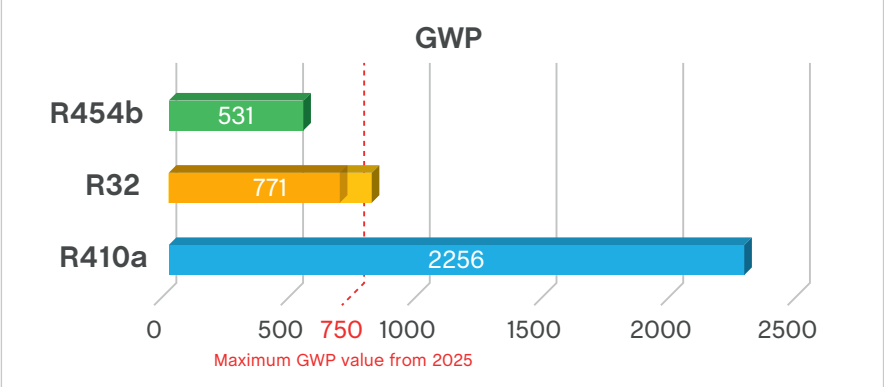
By making these principles their own, each stakeholder is placed in the position of being able to boldly contribute to the achievement sustainability objectives, which concurs to make the planet a more comfortable place to live.

Why R454B?

R454B is **the lowest GWP refrigerant value option to replace R410A**. Compared to R410a (with a GWP of 2256), R454B has a GWP of 531, therefore offers **a 76% decrease and 31% reduction compared to R32.**

By making these principles their own, each stakeholder is placed in the position of being able to boldly contribute to the achievement sustainability objectives, which concurs to make the planet a more comfortable place to live.

The global warming potential represents the contribution to the greenhouse effect of a gas, with respect to CO_2, whose reference potential is equal to 1. Saying that R454b has a GWP of 531 means it has an impact 531 times bigger than CO_2 in heating the atmosphere.

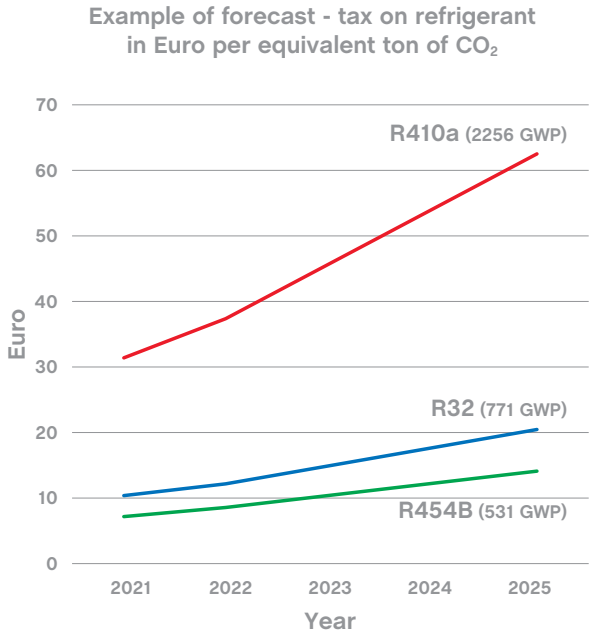


Data relating to the Sixth Assessment Report IPCC AR6, released on August 6, 2021. Final data will be available in 2022.

A look at the future...

Yes! R454B is future-proofness refrigerant.

It guarantees a long term advantage in term of availability, access to government subsidies, taxes and local regulations on R410a refrigerant use.



Our solutions make use of exclusively electrical equipment, with no CO_2 emissions into the atmosphere.

Our solutions

COOLING SOLUTIONS The Thermocold chillers range has been designed to guarantee the highest efficiency standards on the market and to offer our customers a versatile and innovative solution.
Compliant with the ErP energy efficiency requirements in force in Europe from 1 January 2021, related to all comfort and process chillers, the range offers a wide choice of models and configurations with seasonal energy efficiency values SEER up to 4,67 and SEPR HT up to 5,95 and ensures excellent performance thanks to a careful selection of components among the best on the market.

HEATING SOLUTIONS Can you imagine the huge amont of energy that could be saved by only renovating the existing and unefficient heating systems still using gas boilers replacing them by heat pumps?
The wide range of heating solutions aimed at maximizing the energy efficiency levels of buildings consists of reversible air-water and water-water heat pumps for outdoor and indoor installations, presenting SCOP values up to 4,53.

ENERGY SAVING SOLUTIONS The range consists of 2+2 pipe multifunction units and 4 and 6 pipe multipurpose units capable of recovering the heat that would be dissipated into the atmosphere with a traditional heat pump, using it to heat other rooms in the building or produce water for sanitary uses. Multifunctional units are considered as the lowest energy consumption solution: for every €/kW spent for the comfort of the building you could get up to 7≈8 kW of capacity for cooling and heating your space. These units have a TER value of up to 7.41.

Application fields

For decades, we have partnered with building owners and facility managers to understand their challenges and explore interesting opportunities, such as the reuse of energy thermal not exploited inside the buildings.

High efficiency and continuous operation are ensured by cutting-edge systems for a wide range of applications comfort in cooling or heating and applications process at high temperatures up to 80°C.

HOTELS - RESORTS

HEALTHCARE
HOSPITALS

SCHOOLS - UNIVERSITY

SPORT CENTRES

CINEMA - THEATRES

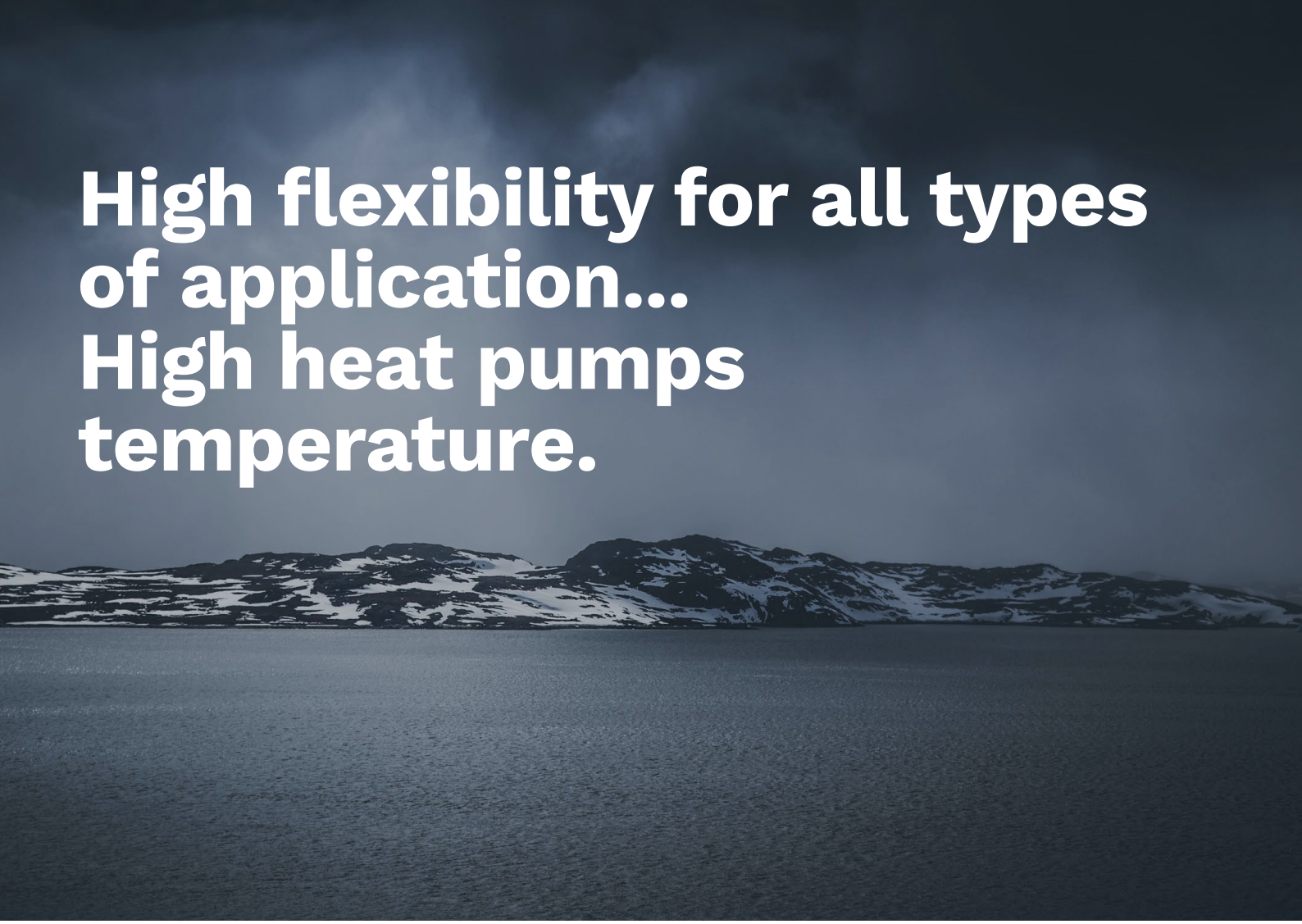
OFFICE BUILDINGS

COMMERCIAL ACTIVITIES

INDUSTRIAL PROCESSES

FOOD AND BEVERAGE

RESIDENTIAL BUILDINGS



High flexibility for all types of application... High heat pumps temperature.

EXR Line (Extended operative range)

	MEX EXR	H M	H M	Outdoor temperature = -20°C Max water temperature = 65°C	
	DOMINO EXR	H M	H M	Outdoor temperature = -20°C Max water temperature = 65°C	

TYPE OF INSTALLATION

- HIGH TEMPERATURE FANCOILS
- MEDIUM TEMPERATURE FANCOILS
- FAN RAD MIX TERMINAL
- RADIANT PANEL

HOT SANITARY WATER DEMAND

- HIGH TEMPERATURE
- MEDIUM TEMPERATURE

Born as an optimized technology for heating, the units of the EXR line are characterized by an extended operating map that ensures HIGH RELIABILITY to the system, FEWER components and LESS downtime thanks to liquid injection and sophisticated electronic control.

Thanks to a higher condensing temperature and a lower evaporating temperature and the ability to guarantee a higher outlet water temperature produced at very low outdoor temperatures, they are a solution for various plant needs.

Multifunction Unit: a long history at the service of innovation.

Since its premiere in 1994 multifunction unit, Thermocold has accumulated a vast background of experience and knowledge, above all in terms of integration between the machine and plant, certainly one of the most delicate issues in the use of multifunction unit.

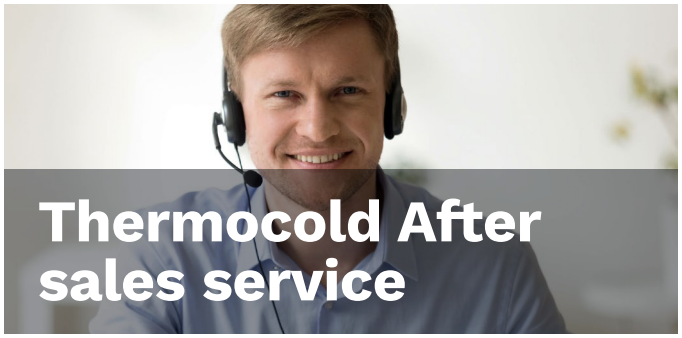
Multifunction units fall into two categories:
- multifunction systems for 2 + 2 pipe systems: the "**ENERGY**";
- multifunction systems for 4-pipe systems: the "**QUATTRO**".

The **ENERGY** unit was created to guarantee the user a green and low consumption solution and its name comes from "Energy Recovery", the key principle behind its design. The unit is able to recover the heat that, in a traditional heat pump, should be dissipated in atmosphere, using it to produce hot water for domestic uses.

QUATTRO units satisfy the simultaneous demand for heat and cold throughout the year, recovering the heat than with a traditional one heat pump should be dissipated in the atmosphere, and using it to heat other areas of the building or produce water for uses sanitary.

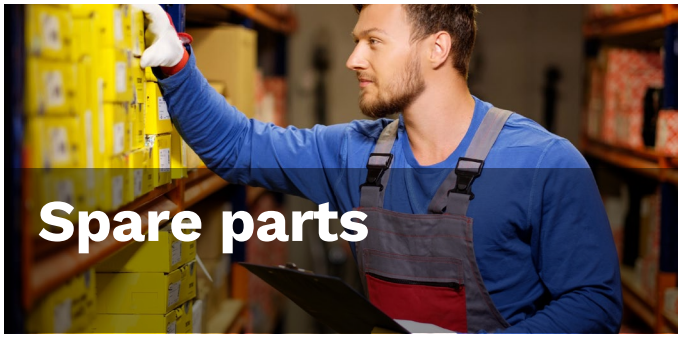
The high flexibility of the multifunctional units allows different types of applications: these systems are suitable for apartments buildings and villas but also for shopping centers, hotels and wellness centers and, besides, they are able to satisfy the more complex plant requirements of industrial processes.

Thermocold is always close to its customers



Thermocold After sales service

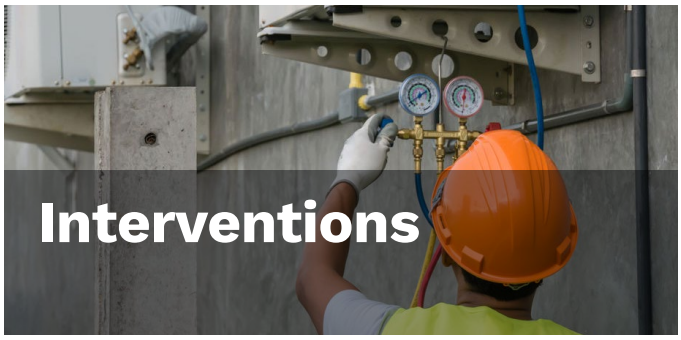
Providing an excellent after-sales service means always guaranteeing the fine-tuning of the installed units and carrying out ordinary and extraordinary maintenance interventions to achieve the highest standards of quality and efficiency: with an extensive network of service centers scattered throughout the national territory, Thermocold guarantees constant support to its customers.



Spare parts

Thanks to a large dedicated warehouse, Thermocold guarantees our customers the availability of original spare parts, supplied directly from our factory. fast deliveries to promptly restore the unit operation.

Thermocold guarantees its customers a quick and accurate service for any type of repair, intervention and maintenance of the unit thanks to a specialized technician's team.



Thermocold offers various maintenance plans suitable for everyone's needs customer and the characteristics of each machine, carried out directly by expert technicians to ensure the highest level of quality service and original spare parts.
By relying on the Maintenance Service Thermocold programmed, you can guarantee at your plant the operating conditions ideals and maximum energy savings.
Choose an appropriate maintenance plan will allow you to:

- prevent any inconveniences or anomalies that may generate problems more expensive, saving on direct and indirect costs;
- save on operations, up to 25% of costs;
- save on energy, as maintenance scheduled ensures your group refrigerator with maximum efficiency.

Our Service network is spread worldwide with more than 50 distributors available to support you to ensure your HVAC system keeps high performance and the same efficiency for the whole lifetime of the unit.
All authorized service centers follow our periodic training courses at our factory, to always be updated on the news of the range and on the new technologies used.

All Thermocold products are covered by a standard 12-months warranty from the date of first start-up.
This period can be extended up to 66 months, by choosing a warranty extension plan during the purchase phase and by signing a maintenance contract for the entire warranty period.

Contact us at:

Information: info@thermcold.it
Assistance: sat@thermocold.it
Office: +390805312623

Visite the website: www.thermocold.it

Cod. CP-EN 04-22