



**TRANE®**



## *Sustainable HVAC solutions for healthcare*

*Optimizing cooling and  
sanitary hot water production*



**XSTREAM**



**HFO**  
R1233zo R1234ze

**SINTESIS™**

**TRANE**  
TECHNOLOGIES

## Understanding hospital cooling and heating needs

A smooth-running HVAC system is critical for hospitals. From staff comfort to patients' care, it has a positive effect on your operation and your bottom line. Trane has decades of experience in hospitals and understands how to ensure the highest standards of safety and comfort. We have expertise in emerging areas like distributed energy resources, digital connected technologies, and strategic energy supply and demand management. At Trane, we know that we can make a positive impact, and that is why we provide industry-leading efficiencies, sustainable solutions, world-class building automation systems and a complete energy services portfolio designed to maximize your facility potential.

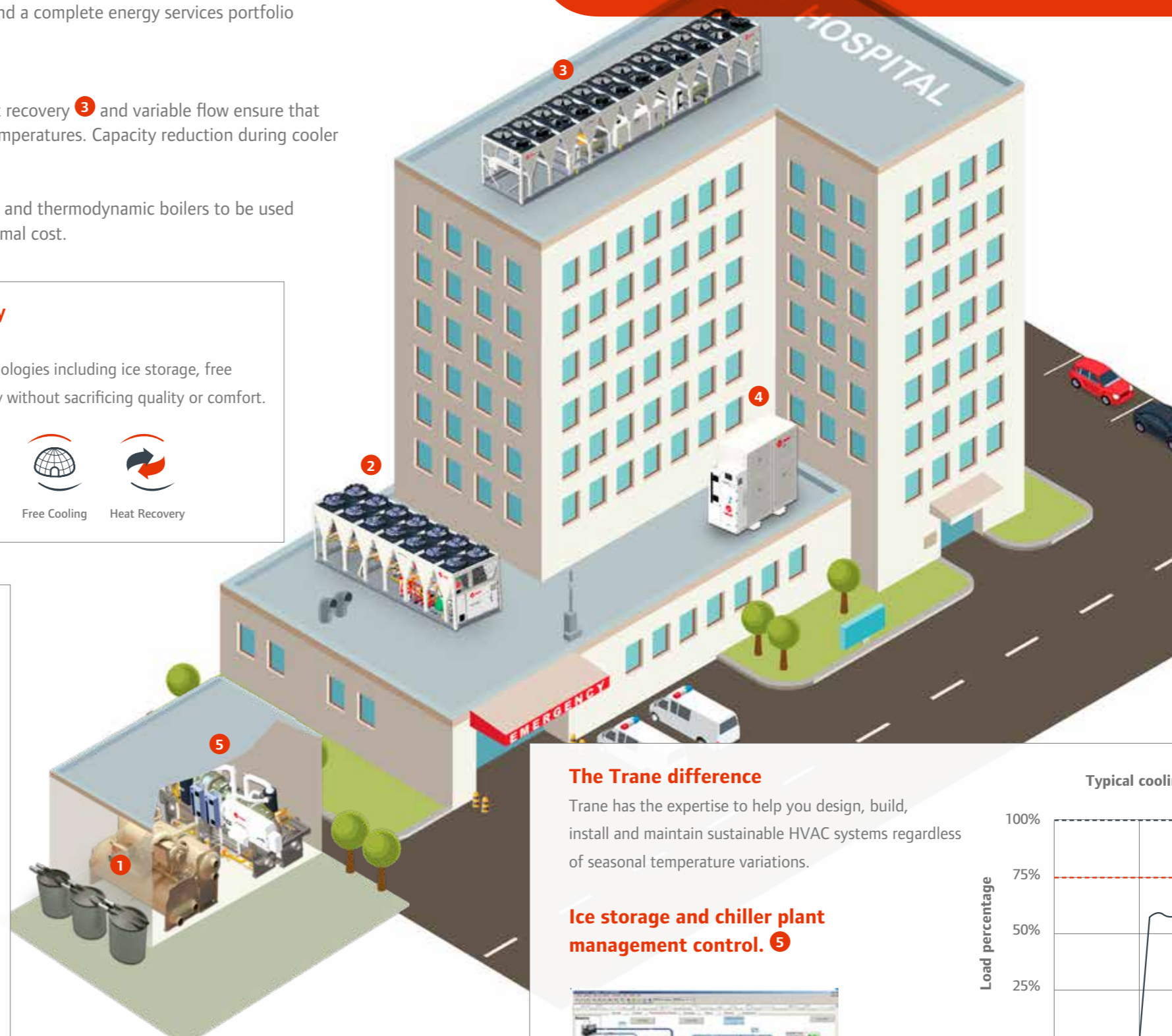
### Cooling

A global approach including ice storage ①, free cooling ②, heat recovery ③ and variable flow ensure that healthcare operations run smoothly regardless of high outside temperatures. Capacity reduction during cooler weather enables substantial energy savings.

### Sanitary Hot Water

Trane installations ④ allow boilers to be stopped during summer and thermodynamic boilers to be used up to 80°C to produce sanitary hot water at a fraction of the normal cost.

**TRANE PROVIDES COMFORT AND EFFICIENCY TO 1000 HOSPITALS ACROSS EUROPE**



### Combining maximum efficiency and high reliability with low carbon footprint

Trane integrated HVAC systems use state-of-the-art, proven technologies including ice storage, free cooling and heat recovery to optimize the efficiency of your facility without sacrificing quality or comfort.



### University Hospital, Strasbourg

#### The Challenge:

Install a central power plant serving the entire site to:

- Optimize cost efficiency
- Optimize energy efficiency
- Maximize reliability
- Produce sanitary hot water in summer during technical shutdown of boilers

#### The Solution (18 MW)

Trane installed and commissioned two centrifugal chillers and two water-cooled chillers (the 4 chillers are 12 MW). A Trane Chiller Plant Manager controls the HVAC system also including two ice storage tanks (6 MW). In addition, a maintenance contract was provided with a one-year energy management plan (Trane Intelligent Services).

#### The Result

Trane was selected because of their knowledge and experience in healthcare, specifically cost optimization, ice storage and innovative refrigerants. The client expressed total satisfaction with the solution and its execution. Electricity consumption is set to be halved.



SINTECIS™



CenTraVac™

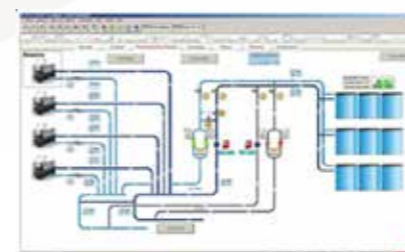
### Our sustainable portfolio

Trane portfolio comprises innovative air- and water-cooled platforms designed to minimize environmental impact and meet environmental goals. HFO refrigerant is available on all Trane units (150 kW to 14 MW).

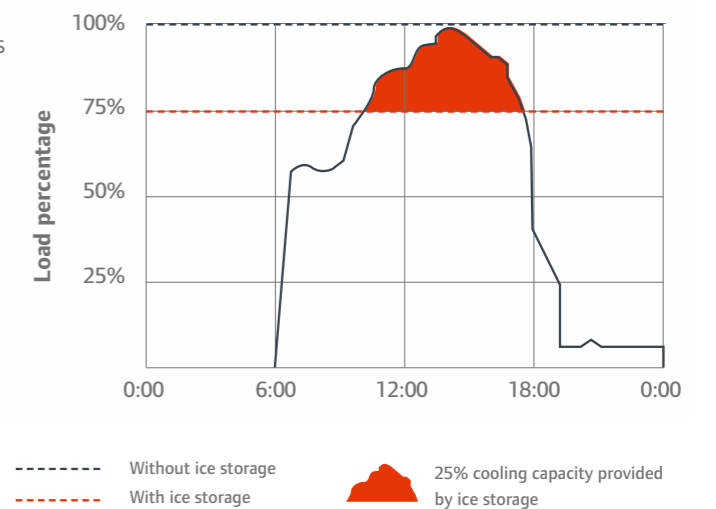
### The Trane difference

Trane has the expertise to help you design, build, install and maintain sustainable HVAC systems regardless of seasonal temperature variations.

### Ice storage and chiller plant management control. ⑤



Typical cooling load profile of a hospital





# Trane Services

The real expertise of a manufacturer



- Systems approach
- Dependable installations
- Energy saving solutions
- Operating cost optimization
- Chiller plant management solutions
- Chilled water production solutions.

At Trane, we are committed to providing a comprehensive portfolio of HVAC solutions throughout your system lifecycle.



## Breakdown resolution

No one plans for breakdowns, but when they happen you need the right partner. Our expert Service Engineers use the latest diagnostic tools to guide you through your options to Repair, Renew, Replace or ReThink.



## Secure operations

At every point during the lifetime of your equipment - installation, commissioning, maintenance or breakdown - Trane can offer an effective solution with commissioning, first-aid kits and service agreements.



## System upgrade

Trane Building Advantage

Trane is committed to bringing the latest technological advantages to our customers through a wide portfolio of solutions which increase the Efficiency, Reliability and Sustainability of their HVAC plants. Our Service Engineers use their expertise together with the latest diagnostic tools to future-proof your system and make it “better than before”.



## Equipment rental

For special events, exceptional needs or when you want to ReThink HVAC management, Trane Rental Services have the right solution. With our extensive fleet of equipment, we can perfectly match your temporary heating and cooling requirements.



## Contact us

With over 1000 of the best trained sales engineers and service technicians in the industry, Trane is in the best position to serve your needs. Just call us and we will help you configure the right solution for your HVAC system.



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit [trane.eu](http://trane.eu) or [tranetechnologies.com](http://tranetechnologies.com).