INFRANORM®

+ DISRUPTION INSIDE

Welcome to the future of hall conditioning

Conventional thinking belongs to the past.
A new era begins – bringing an end to inefficient systems.

Yesterday's building technology can no longer meet today's demands. Rising temperatures, airtight buildings, and increasing automation place new pressure on facilities – while the energy market adds even more uncertainty. Yet many still rely on traditional compression cooling: expensive to install, complex to maintain. And with climate-damaging refrigerants, part of the problem, not the solution.

Sustainable Hall Conditioning – the abandonment of compromise technology.

The key questions to be asked are:

- **How can hall temperatures be kept under control in a cost-effective way?**
- **How can both people and machines be protected – without additional cost?**
- **How can fresh air enter the hall without wasting heating or cooling energy?**
- **And finally: Is there a system for this that not only works, but also thinks ahead?**

CAN THIS ALSO BE ACHIEVED IN A SUSTAINABLE AND ECONOMICAL WAY?

INFRANORM®

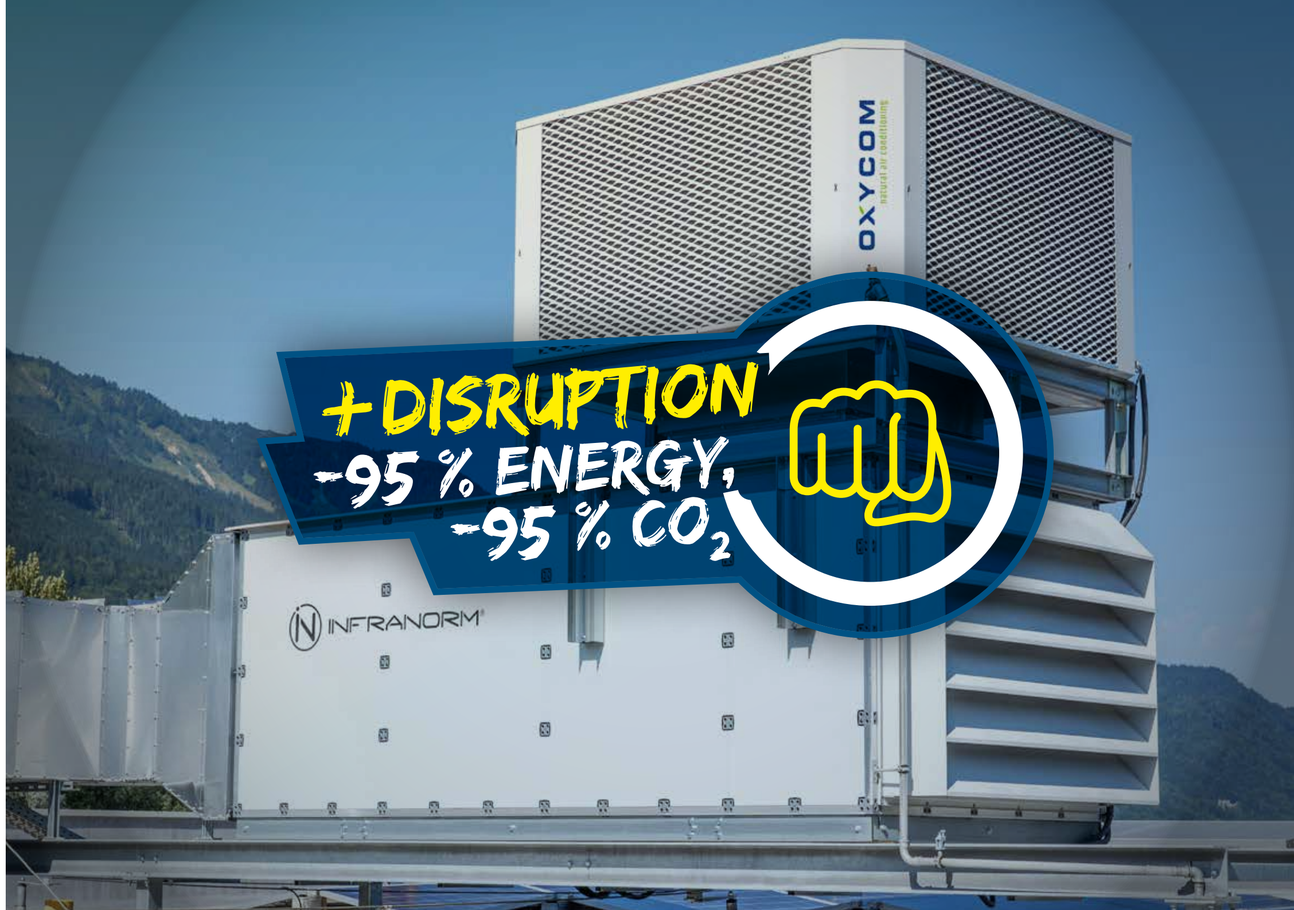
> Our sustainable indoor climate control cut costs and reduce environmental impact – a true step forward for companies looking ahead.
>
> **Christian Lindner**
> Founder & CEO

We are rethinking indoor climate control.
Not as an individual measure, but as a system:
Stable. Efficient. Clean. Residue-free.

Instead of oversized cooling machines:
+ consistent temperature control
+ healthy fresh air
+ no toxic or flammable refrigerants
+ less downtime, less risk – more control

Sustainable hall conditioning is not just a technical component – it's a shift in perspective

SCAN FOR INNOVATION!



Gamechanger
for overheated halls

A comprehensive modular system paired with technologies that break the status quo. This creates indoor conditions that remain ideal all year round – no matter how hot it gets outside. And all without worrying about skyrocketing operating costs or outdated cooling methods. Efficiency, cost-effectiveness, and environmental protection finally come together as one.

How does this sound: **19 °C supply air at an outside temperature of 37 °C** – and all without expensive energy and refrigerants? This is what modern hall air conditioning looks like at INFRANORM®.

The future won't wait – it starts now!

- **Stable production conditions**
- **Comfortable conditions 365 days a year**
- **Sustainable and ESG-compliant**
- **Modular und flexible**
- **Industrial quality and upgradeable**
- **No F-gases, PFAS, or hazardous refrigerants**
- **100 % fresh air**
- **Up to 95 % less cooling and 40 % less heating costs**
- **Up to 95 % less CO_2**
- **Planning reliability through simulation**

SCAN THE CODE ...

and experience hall cooling in a whole new way – without refrigerants and without compromise!

Economical cooling
Up to 95 % reduction in energy costs
Up to 95 % reduction in CO_2 emissions
compared to compression cooling
Limiting the maximum room humidity

Precision air conditioning
Up to 60 % smaller refrigeration unit
Up to 60 % lower CO_2 emissions and operating costs, Humidification and dehumidification

Heating
Heat pump, electricity
Gas, hot water

Presicion air conditioning
Pressure control, maximum fresh air volumes, odor reduction

Cooling with photovoltaics
CO_2-neutral and energy-self-sufficient cooling

Pre-cooling & retrofit
Upgrade for existing systems
Replacement of cooling systems

Heat recovery
Process waste heat utilization
Heat exchanger systems
Circular flow systems
Ventilation without heating costs

Industrial air purification
Layer & displacement systems
Integrated heating, cooling, fresh air, ...

Revolutionary system combines economy and ecology

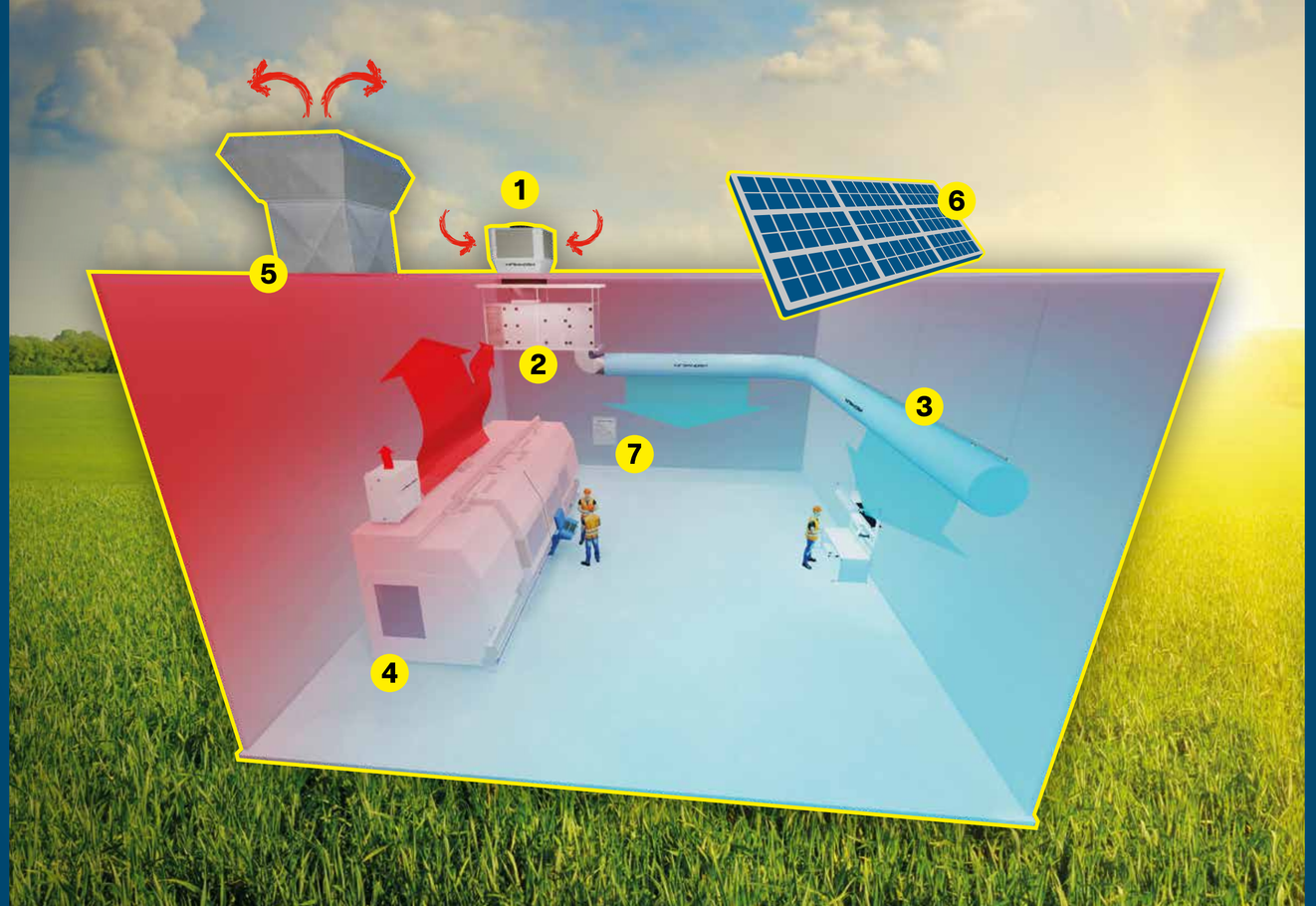
Industrial production environments are challenging – for people, machines and indoor climate. Sustainable Hall Conditioning breaks with traditional approaches and offers a revolutionary solution that combines cost-effectiveness, physical comfort and environmental responsibility.

At the core of our technology is a two-stage cooling system that uses water instead of electricity and does not use climate-damaging refrigerants. With SHC, CO_2 emissions and operating costs are reduced up to 95 %.

Fresh air is distributed evenly throughout the hall without creating drafts, significantly improving working conditions. Intelligent air treatment balances temperature fluctuations and ensures energy-efficient operation in winter

In addition, INFRANORM®'s innovative exhaust air concept ensures that excess heat is efficiently dissipated under the ceiling.
This is how we guarantee a stable indoor climate and consistent process conditions.

WITH SHC WE ARE SETTING NEW BENCHMARKS IN THE INDUSTRY – FOR SUSTAINABLE AND FUTURE-PROOF MANUFACTURING ENVIRONMENTS.



1 Award-winning two-stage cooling technology
Provides powerful cooling with the power of water and saves 95 % CO_2 and operating costs

2 Secondary air treatment
Provides cofortble, clean air all year round

3 Air distribution
Draft-free fresh air supply via finely tuned airflow – for a pleasant indoor climate without disruptive air movement

4 Processing machine
Production facilities cause emissions and up to 80 % of the heat emission in the hall.
They are an important basis for design

5 Exhaust air unit
Conducts waste heat under the ceiling to the outside and ensures optimal air exchange

6 Photovoltaics
For 100 % CO_2-neutral cooling

7 Regulation
Temperature, humidity, ...

SCAN THE CODE ...
and find out how sustainable hall cooling with water is revolutionizing the industry!

INNOVATIVE COOLING

WITH ADIABATIC PROCESS

INFRANORM®

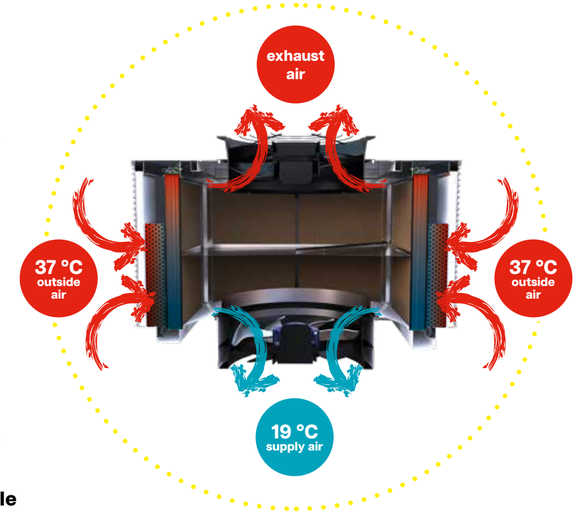
Year-round indoor climate control for the plastics industry

Cooling, reimagined.
Two-stage–the only way.

Adiabatic cooling was long considered impractical–the temperature level was too high and the room air too humid. However, INFRANORM®'s two-stage adiabatic cooling breaks through these limitations: it delivers noticeably more cooling power with significantly less humidity–even under extreme conditions.

The result: stable temperatures, minimal energy and water consumption – without compression cooling.

Get ready to rethink cooling technology from the ground up!



- **Up to 30 % less water usage**
- **Up to 7 °C lower air supply temperature**
- **Up to 60 % less moisture penetration**
- **Smart control with humidity monitoring**
- **Reliable prevention of corrosion**
- **Healthy, comfortable workplaces**
- **Stable and comfortable temperatures in the hall**
- **Highest hygiene standards**

SCAN THE CODE ...

and discover how two-stage adiabatic cooling saves energy, reduces humidity, and ensures ideal indoor temperatures all year round.

Smart retrofitting for maximum savings

SCAN THE CODE ...
and discover how smart retrofitting works easily, quickly, and sustainably.

Retrofit.

Replace inefficient, climate-damaging cooling systems with a future-proof, sustainable solution–without downtime and without interfering with the existing system.

Out with old technology, in with the future.
If you want to stay ahead, act now!

- **Quick retrofitting or conversion without interrupting operations**
- **0% F-gases, 0% PFAS**
- **Up to 95 % lower operating costs and CO_2 emissions**
- **Possible substitution of the refrigeration machine**
- **Less maintenance required**

Pre-cooling.

The perfect addition to recoolers, ventilation units, or chillers. The manufacturer-independent, upstream cooling stage reduces the intake temperature by up to 17 °C–efficiently, quietly, and without water treatment.

If you value efficiency, don't just let hot air pass through–choose smart cooling now!

- **No costly intervention in the ventilation unit necessary**
- **Up to 95 % lower operating costs**
- **Up to 95 % lower CO_2 emissions**
- **Significantly extended operating times of recoolers**
- **More performance & reliability in hot conditions for your chiller**

PRECISION AIR CONDITIONING

FOR THE HIGHEST CLIMATE REQUIREMENTS

INFRANORM®

Hybrid precision conditioning for the highest demands

Smart way to cool

Intelligent cooling that adapts – for maximum efficiency in every climate zone. Whether for highly sensitive metrology rooms, precision component manufacturing, or applications with the most stringent temperature and humidity requirements, Sustainable Hall Conditioning Hybrid delivers what conventional systems cannot. Even under extreme conditions such as tropical heat, high humidity or in regions close to the sea, SHC Hybrid remains reliable and efficient.

The next generation of hall cooling –
adaptive, precise, future-proof.

+DISRUPTION
-60 % ENERGY,
-60 % CO_2

- **Up to 60 % smaller refrigeration unit**
- **Up to 60 % less CO_2 emissions**
- **Up to 60 % lower operating costs**
- **Humidification and dehumidification**

SCAN THE CODE ...

and experience how intelligent cooling sets new standards – even under extreme climatic conditions.

SELF-SUFFICIENT COOLING

FOR INDUSTRIES THAT ARE ALREADY THINKING ABOUT TOMORROW

Conditioning of production hall with photovoltaic support

INFRANORM®

Those who want a future cool differently

+ DISRUPTION
-100 % ENERGY,
-100 % CO_2

With its innovative combination of Sustainable Hall Conditioning (SHC) and photovoltaics, INFRANORM® is fundamentally changing hall cooling.

The solution is not only CO_2-neutral, but also energy self-sufficient. Companies can drastically reduce their operating costs by relying on solar power they generate themselves, thereby becoming independent of rising electricity prices. This sustainable technology is more than just an alternative: it is a step toward an efficient and environmentally friendly future.

Those who embrace progress today are shaping the future– sustainably, smart, and without compromise.

- **Hall conditioning without energy costs**
- **No CO_2 emissions**
- **Everything from a single source**
- **In every performance size**

SCAN THE CODE ...
and find out how self-sufficient hall cooling works.

BEST PRACTICE

SUSTAINABLE HALL CONDITIONING

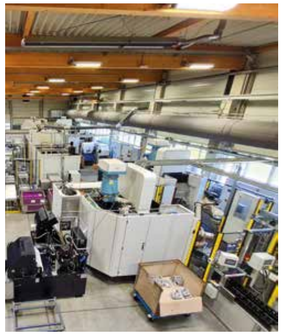
Hall conditioning with pressure equalization

INFRANORM®

Our passion?
Success stories

Our customers have achieved impressive results with our groundbreaking indoor climate control solutions. Discover how we have overcome challenges together and developed sustainable, cost-efficient solutions that go far beyond conventional approaches.

We are proud to share these inspiring stories.



SCAN THE CODE ...

and discover how our technology can revolutionize your production environment!

PARTNERSHIP
FOR SUSTAINABLE MAKERS

INFRANORM®

Together we improve the future

Sustainability connects.
Become a partner now

Expand your portfolio with a sustainable solution that does more than just look good.
Choose technology that saves up to 95 % CO_2 and reduces operating costs by 95 %.

No empty talk, just real potential.
We give you everything you need: training, planning and simulation tools – and direct access to a network that really makes a difference.

Become a partner now – and together we will turn hall conditioning on its head.

- **Sustainable competitive advantage**
- **Innovative technology**
- **Modular system**
- **All-in-one solution from a single source**
- **System control & sensor technology incl.**
- **Comprehensive planning support**
- **Simplest configuration without expert knowledge**
- **Simulation tool based on climate data and hall values**
- **Exchange with experts**
- **Comprehensive sales support**

> The Sustainable Hall Conditioning system won us over immediately. The training provided by INFRANORM® was practical and informative. The consultation, delivery, and commissioning went smoothly. The collaboration was open, reliable, and truly trustworthy.
>
> **Ing. Simon Hörburger**
> Managing Director Hörburger
> Air and Climate Technology

SCAN FOR MORE FACTS!

Are you ready to get started together?

Planners & technical offices
Sustainability, energy, and HVAC experts

Plant engineers & general contractors
For hall construction, industrial plants & system integration

Companies in the field of heating, ventilation, cooling

INFRANORM®

HARD WORK AND CONSISTENT COMMITMENT

SUCCESS IS THE BEST ARGUMENT:

TOP COMPANIES!
TOP REFERENCES!

- German/Austrian Environmental Management Award, best climate protection measure
- Winner of the Energy Globe Award, game changer in room cooling
- Best Environmental Innovation, Award from the Federal Ministry
- Winner of the Pegasus Business Award in bronze, category Innovation Emperor for the development of sustainable hall conditioning

INFRANORM® Technologie GmbH
office@infranorm.com
infranorm.com