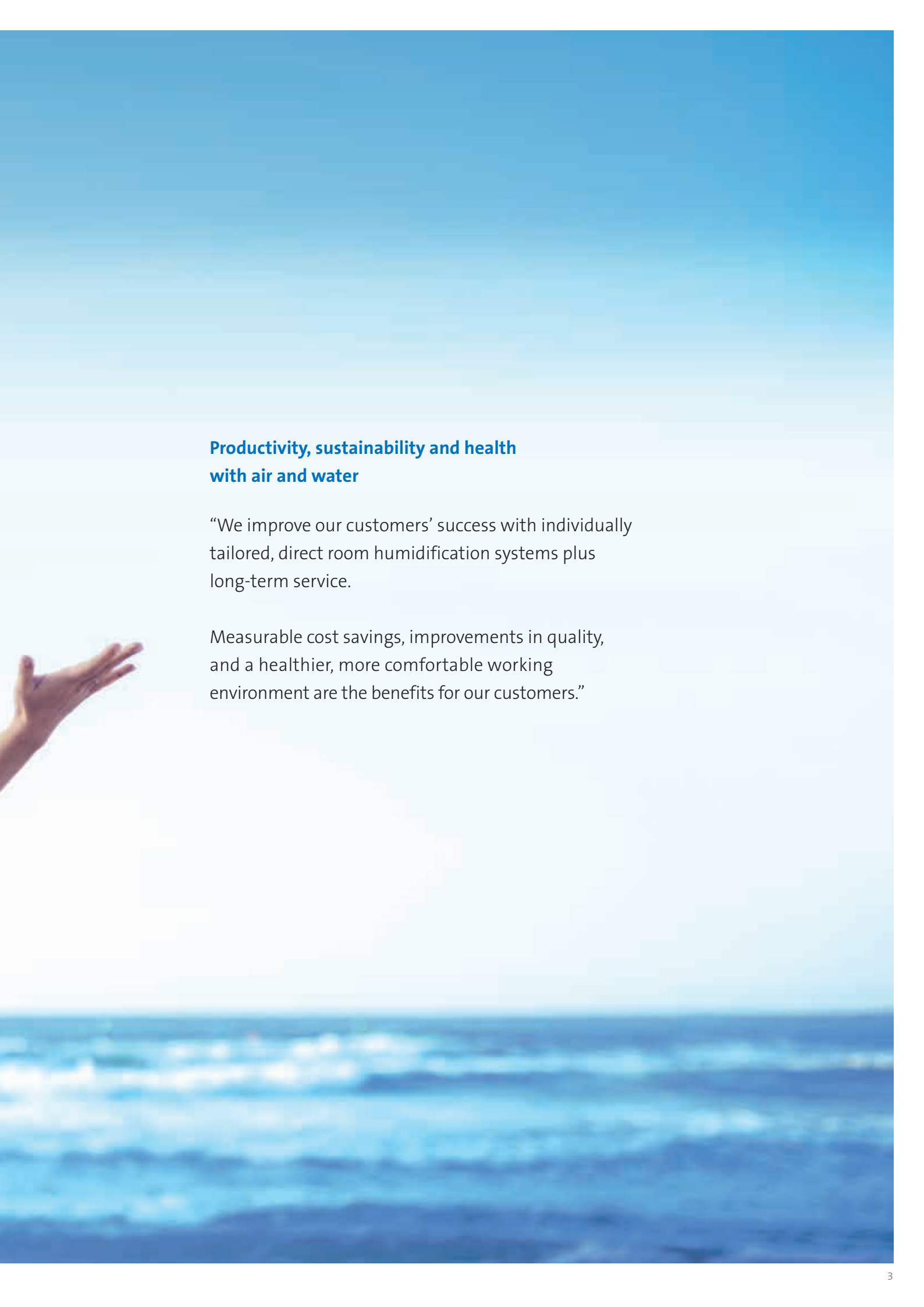

**OUR
HUMIDIFICATION:
A SYSTEM FOR SUCCESS**



**SUCCESS IS IN THE AIR –
WITH OUR
HUMIDIFICATION**




A hand is visible on the left side of the page, reaching out towards a bright light source over the ocean. A rainbow is visible in the sky, arching over the water. The background is a clear blue sky and a blue ocean with white-capped waves.

**Productivity, sustainability and health
with air and water**

“We improve our customers’ success with individually tailored, direct room humidification systems plus long-term service.

Measurable cost savings, improvements in quality, and a healthier, more comfortable working environment are the benefits for our customers.”

DID
YOU KNOW
THAT ...



... every kilogram of evaporated water can achieve a cooling capacity of **640 W**?

... more than **25 %** office workers suffer from the effects of dry room air?

... humidity levels that are too low can make electrostatic charges as much as **50 times** higher?

... the human body is 70% water by weight and the average office worker will lose **half a litre of water** due to evaporation during an eight-hour day?

... **viruses and bacteria**

survive the longest in dry air, and also spread in dry air the fastest?

... the quality of hygroscopic materials such as **paper, wood and textiles** decreases when air is dry?

... every day, up to **15,000 litres** of air pass through our nose, mouth and lungs?

... a direct room humidification system can pay for itself after just **2 years**?

... the **immune response** of mucous membranes is inactivated when relative humidity drops below 20%?

... when the **temperature** rises by 1 °C, relative humidity falls by 3%?

... an optimum level of humidity **cleans** the air by binding dust particles together?



SAFETY FOR PEOPLE,
PLANT AND
PRODUCTION MATERIALS

HUMIDIFICATION

FOR PEOPLE, PLANT AND PRODUCTION MATERIALS

Humidity cannot be seen or touched and only felt at extreme ends of the scale. But although invisible, this process factor influences the quality and the success of three elements central to any value chain in manufacturing and services.

People

Air that is too dry endangers the health and well-being of people in the workplace: irritated mucous membranes, dried airways, disorders affecting vocal cords, burning eyes and an increased risk of viral infection have a direct impact on absences due to sickness and employee productivity levels.

Production materials

Paper, packaging, wood, textile fibres, paints, leather and foodstuffs are quick to respond to ambient air conditions that are too dry: their deformation, drying out, cracking and lack of elasticity or adhesion endangers the quality of end products, and can cause serious disruptions to downstream processes.

Plant

The speed and trouble-free operation of many kinds of production machinery is dependent on humidity remaining at an optimum level. Dry air promotes electrostatic build-up, which can cause damage, defective parts and production stoppages. In addition, the waste heat from machinery can be reduced by the evaporative cooling effects of a humidification system.

Recommended humidity

Application	Relative humidity
Office	40% – 50%
Electronics	50% – 55%
Print shop	50% – 55%
Wood	55% – 60%
Food	50% – 90%
Laboratory	40% – 50%
People	40% – 60%
Museum	40% – 60%
Datacentre	40% – 50%
Textiles	65% – 90%
Packaging	45% – 60%

“Humidification makes an important contribution to optimising our manufacturing processes and protecting the health of our employees.”



Felix Timmermann
General Manager EEMEA Region
Asteelflash Hersfeld GmbH, Germany

HUMIDIFICATION SYSTEMS

FOR ANY APPLICATION

For a very wide range of applications, controlled humidification has a major influence on the quality and stability of manufacturing processes, and on the health and well-being of the company's employees.



CORRIDOR

Creates an indoor climate that promotes good health in the adjoining office and work areas.

OPEN-SPACE OFFICE

Protects the airways, vocal cords, eyes and skin. Reduces absences due to illness and creates a pleasant and stimulating climate.



LABORATORY

Creates controlled laboratory conditions, reduces static electricity and effects that are harmful to health.



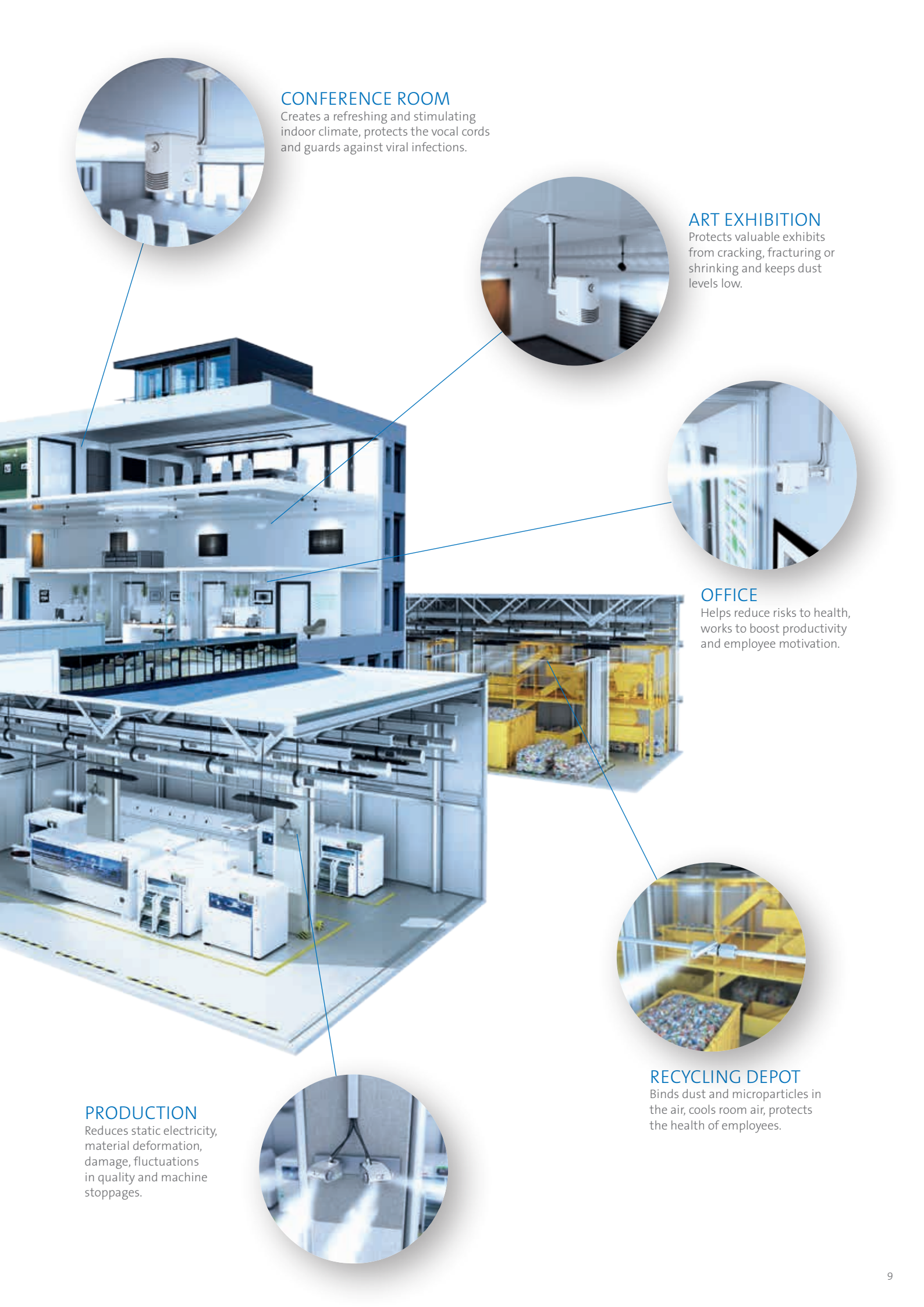
DATA CENTRE

Reduces static electricity, helps to cool rooms down and remove dust from the air.



WAREHOUSE

Secures standardised conditions for production, protects against damage and stops materials drying out.



CONFERENCE ROOM

Creates a refreshing and stimulating indoor climate, protects the vocal cords and guards against viral infections.



ART EXHIBITION

Protects valuable exhibits from cracking, fracturing or shrinking and keeps dust levels low.



OFFICE

Helps reduce risks to health, works to boost productivity and employee motivation.



RECYCLING DEPOT

Binds dust and microparticles in the air, cools room air, protects the health of employees.



PRODUCTION

Reduces static electricity, material deformation, damage, fluctuations in quality and machine stoppages.

**THE RIGHT SOLUTION
FOR
EVERY APPLICATION**



OUR SYSTEM

MANY SOLUTIONS

Air humidification needs more than just “one-size-fits-all”. The requirements for the wide range of applications are simply too different in practice. As a specialist for direct room humidification, Condair Systems always has the right solution at hand.







Direct room humidification



Independently of any existing central ventilation and air conditioning system, the direct room humidifiers are installed at the exact locations where air humidification is required.

A choice of varying levels of humidification performance, sizes and technologies guarantees a made-to-measure solution to ensure an optimum indoor climate.

Water treatment

Water is needed for life itself. This is why any humidification system is only as good as the water treatment system that powers it. Condair Systems has the right water purification system and matching maintenance scheme for every system, whatever the size.

Humidifiers		Technology	Room size	Applications
	DRAABE TurboFogNeo 1/2	High-pressure	Medium to large	Manufacturing, sensitive
	DRAABE TurboFogNeo 8	High-pressure	Large	Manufacturing, sensitive
	DRAABE NanoFog Evolution/Sens	High-pressure	Small to medium	Office, lab, museum, etc., sensitive
	ML Princess	High-pressure	Large	Manufacturing, simple
	ML Flex	High-pressure	Large	Manufacturing, simple
	DRAABE BioSafe	Compressed air	Small to medium	Manufacturing, simple

Water treatment		Features	Capacity	Service
	DRAABE Pur Systems	Reverse osmosis High-pressure pulsation Conductance synthesis	Low to high	Full-service maintenance with replacement every six months and all-inclusive package
	ML Systems	Reverse osmosis High-pressure pulsation	High	Individual maintenance agreements with on-site service

**EXPERT ADVICE AND
SERVICES
FROM THE START**



OUR SERVICE

MORE THAN JUST PRODUCTS

Direct room humidification means every building and every application can have the right level of relative humidity. From the start, Condair Systems provides you with non-obligation advice and assistance – from our initial consultation to water analysis and energy cost comparisons, and the presentation of technical alternatives.



Individual planning

Achieving successful humidification always requires professional system design and planning. This is why each system is individually calculated, mapped out and customised in our CAD planning department.



All-inclusive maintenance

Our services really get going after system commissioning! To ensure that the humidification system can be maintained as reliably and comfortably as possible, each system is given its own maintenance schedule. The full-service package for all DRAABE systems bundles all of these services together for our customers, from half-yearly maintenance work and technical updates to hygiene inspections and our lifetime guarantee.



“The full-service maintenance model is a guarantee for the ongoing stability of our process flows with DRAABE humidification.”



Jens Masur
Managing Director
Druckzentrum Osnabrück, Germany

ALWAYS A GOOD FIT:
DIRECT ROOM
HUMIDIFICATION



OUR STRENGTHS

DIRECT ROOM

Our direct room humidification system fits any building and works with any application. From factory buildings to call centres and small laboratories. The individual positioning of the humidifier in the room also enables the humidification of discrete areas in the building – such as floors, corridors, open space offices or parts of a production unit.



Ideal for retrofitting

The direct room humidification system controls humidity independently of an air-conditioning unit. This means humidification is always available to use – even if an air-conditioning unit is not present or if humidification in the air-conditioning ductwork is not possible or desirable. This means our systems are also ideal for retrofitting to existing premises.



Less energy

Our high-pressure nozzle systems consume only a fraction of the primary energy required to run many other kinds of humidification technology, since one positive side-effect of water evaporation is that excess heat loads can be compensated for without requiring expensive cooling plant.



“For us, DRAABE direct room humidification was the only option available for ensuring optimum levels of humidity in the building. Hygiene and energy performance are both outstanding.”



Axel Müller-Uderstadt
Head of Customer Service
Thomas Cook AG, Oberursel, Germany

**SIMPLY RELAX
WITH
AIR HUMIDIFICATION**



OUR PROMISE

RELAX

At Condair Systems, we offer advice, planning, installation and maintenance as an all-in-one package, with all of the service features that give our customers peace of mind from the start: full-service maintenance visits every six months, a lifelong guarantee, free updates, straightforward expansion options and always the latest, state-of-the-art technology. With our humidification systems, everything is included – to ensure our customers can just sit back and relax!



Health

To ensure the hygienic operation of our humidification systems, we use only highly purified water. The integrated water purification unit is combined with comprehensive hygiene functions and long-term maintenance schemes to ensure microbe-free water at all times – documented and certified!



Safe

Safety first – all humidification systems from Condair Systems have been tested to the latest operating and hygiene regulations and are also regularly certified – including after being installed on our customers' premises. In this way, we can guarantee the hygienic operation of our systems without any reservations, with all of the inspection intervals and microbiological testing required, so as to offer our customers full protection against potential risks.



Luftbefeuchtung

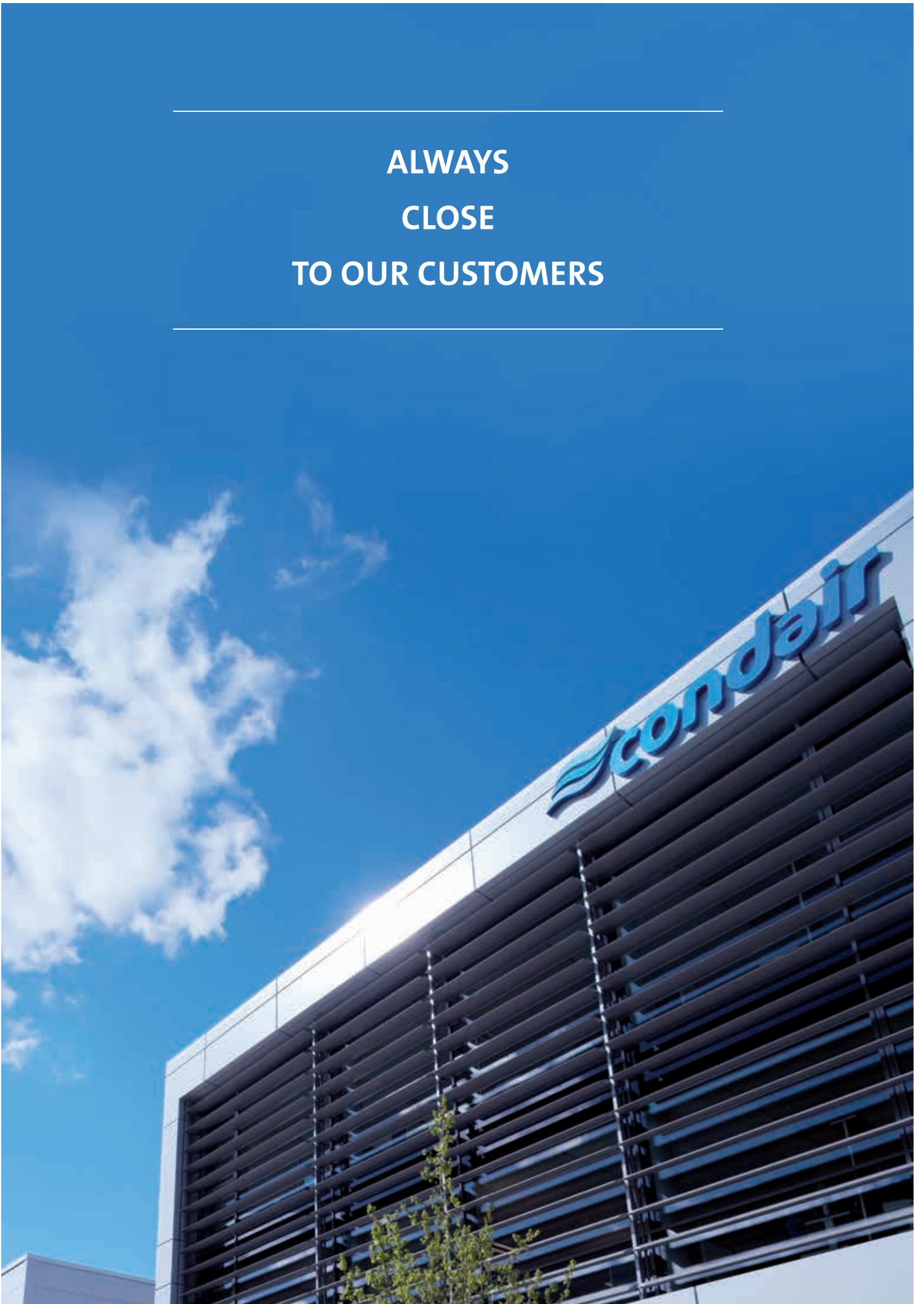


“With Condair Systems, I get the safe and reliable humidification I need – and there’s nothing else I have to do.”



Christoph Pabst
Managing Director
Künzel Druck GmbH, Germany

**ALWAYS
CLOSE
TO OUR CUSTOMERS**



ABOUT US

CONDAIR SYSTEMS

Condair Systems is a specialist producer of direct room humidification systems. Our humidification systems are all-in-one solutions that are carefully tailored to the needs of our end customers and are supported by a comprehensive range of services from planning to maintenance.

Condair Group

As a Condair Group company, Condair Systems combines decades of experience and expertise for each request and application. With a workforce of around 700 employees, Condair Group is the world's leading manufacturer of commercial and industrial humidification systems. The Condair Group includes sales and service organisations in 20 countries, production facilities in Europe, North America and China, as well as international resellers operating in over 50 locations (www.condair-group.com).

Central Europe

Central Europe is the distribution hub for all of the industrial direct room humidification systems from Condair Systems. Located right next to Hamburg Airport, our company headquarters is part of Condair's European Production and Logistics Centre. Located in the heart of Europe, with excellent connections by air, land and water, we stay as close as possible to our customers, offering short lead times and prompt service.

DRAABE humidification

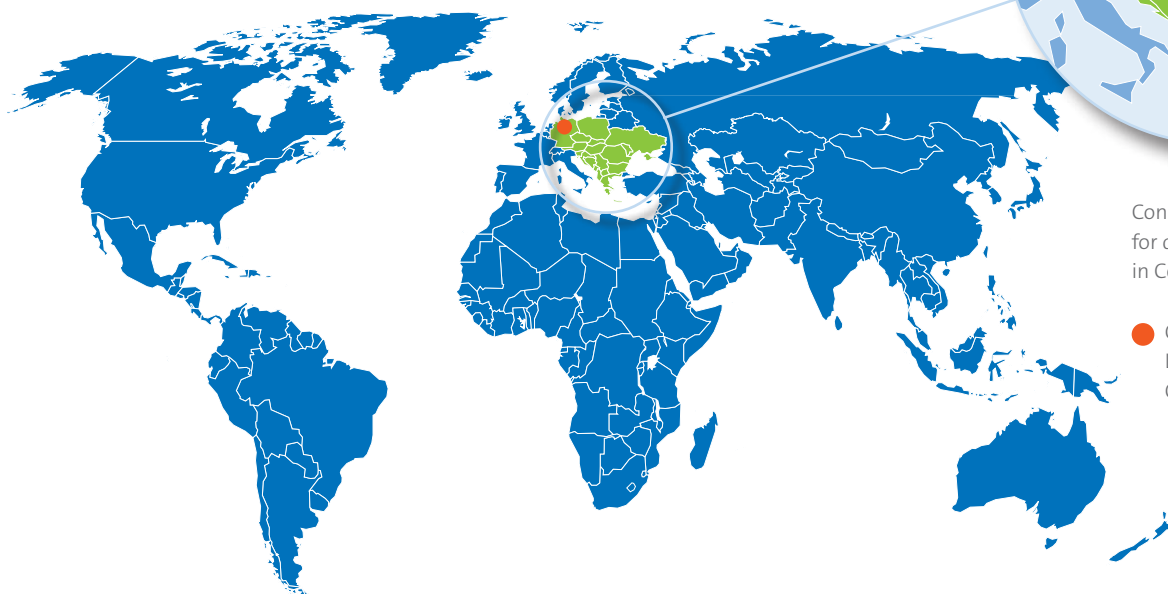
With its core DRAABE brand, Condair Systems* sets standards for hygiene, low levels of maintenance and energy efficiency. For many years now, the innovations and unique features of the DRAABE system have been guaranteeing high-quality solutions for any application and industry.

* Trading until 2017 as DRAABE Industrietechnik GmbH



CONDAIR GROUP'S GLOBAL PRESENCE

www.condair-group.com



Condair Systems sales region for direct room humidification in Central Europe.

● Condair Production and Logistics Centre for EMEA, and Condair Systems headquarters

OUR HUMIDIFICATION: A SYSTEM FOR SUCCESS

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