



emco air conditioning

emcobad

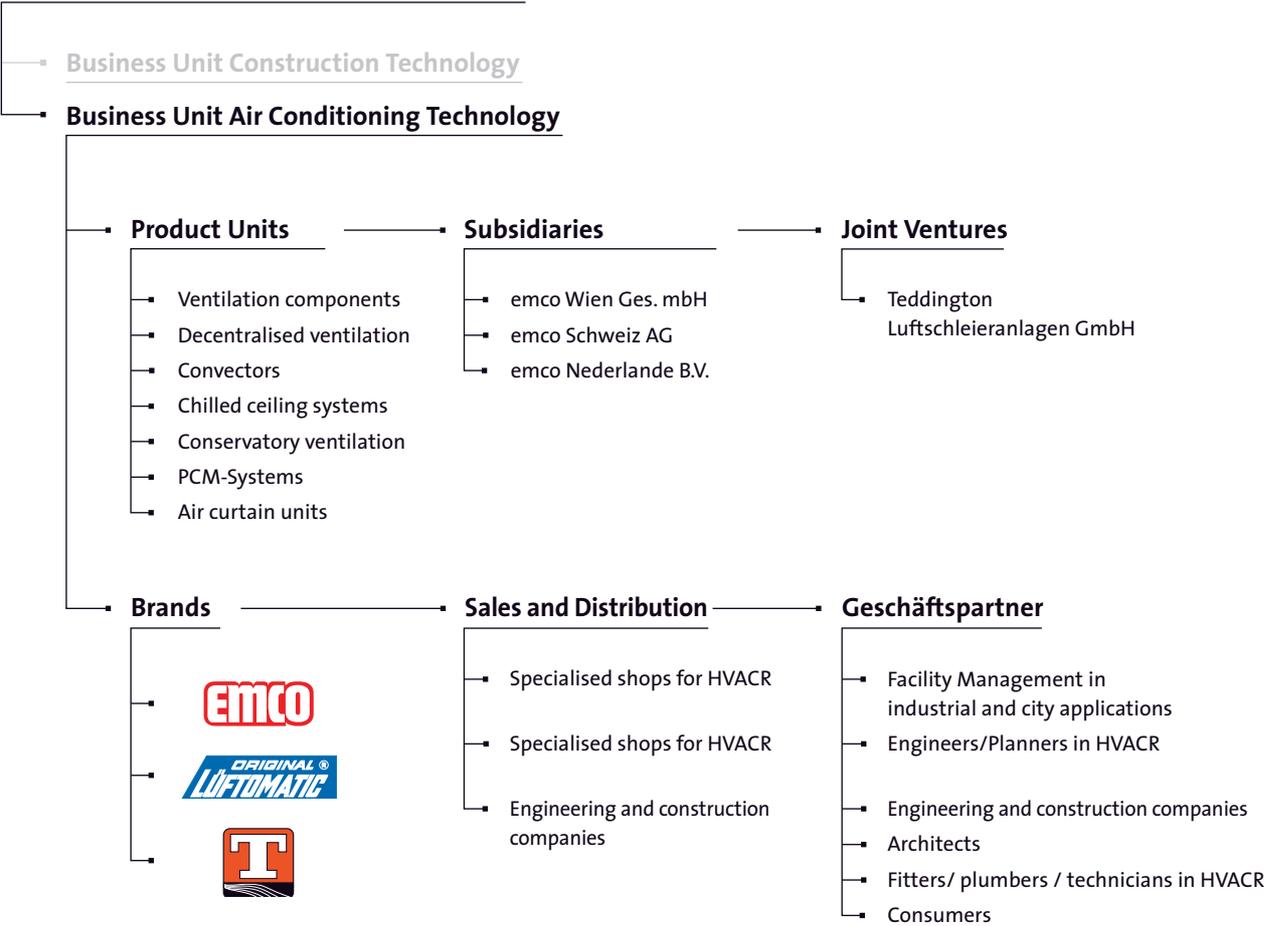
emcobau

emcoklima

**EMCO**

# Business Structure of emco Bau- und Klimatechnik GmbH & Co. KG

## emco Bau- und Klimatechnik GmbH & Co. KG



## Chronology of emco Bau- und Klimatechnik GmbH & Co. KG

<p>1959 Development and manufacture of roll-up grilles</p> <p>60s Founding of business division ventilation technology Development and manufacture of air grilles</p> <p>70s emco's eccentric cylinders are patented and become a new and revolutionary part of emco air diffusers Development and manufacture of emcotherm floor convectors Start of cooperation programmes with polytechnical colleges and universities in the field of research and development in air conditioning technology</p>	<p>80s Specialised air diffusers such as the motor-adjustable WKD and RRA are developed Proprietary lab for air conditioning is established</p> <p>90s Services are improved through the addition of emco's CAP design and specification software New developments are made in the field of swirl and design diffusers</p> <p>since 2000 Heating and cooling convectors for floor, wall and ceiling applications are developed and introduced to the market Chilled ceiling systems are introduced</p>	<p>Patents and products of Kessler Tech GmbH are acquired Lüftomatic products for decentralised ventilation and conservatory ventilation are integrated into the existing product portfolio Acquisition of shares in Teddington Luftschleieranlagen GmbH</p>
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# Tailor-made climate control design concepts for the highest architectural demands

Air handling systems



Air diffusers for comfort and industrial sectors



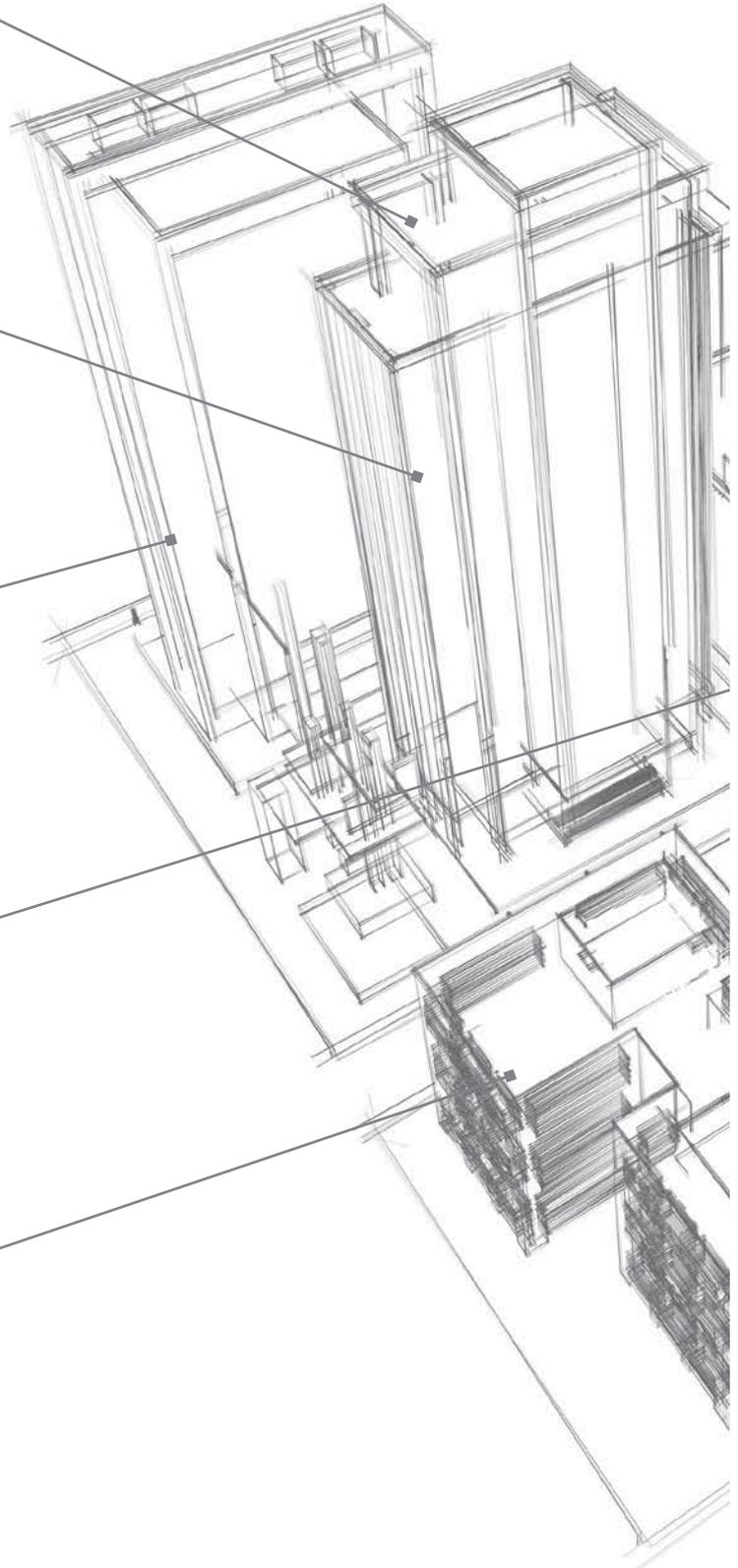
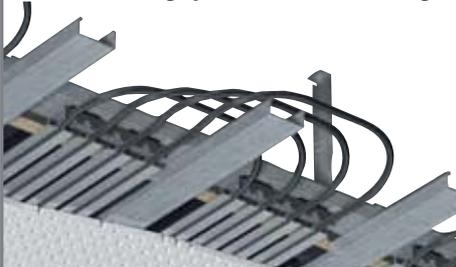
Convectors for floor, wall and ceiling

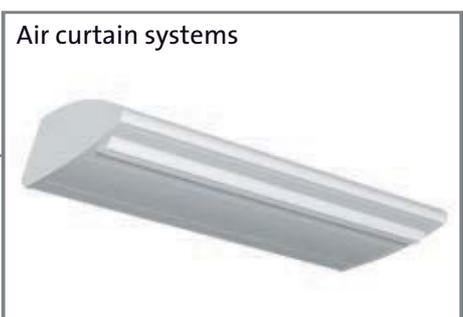
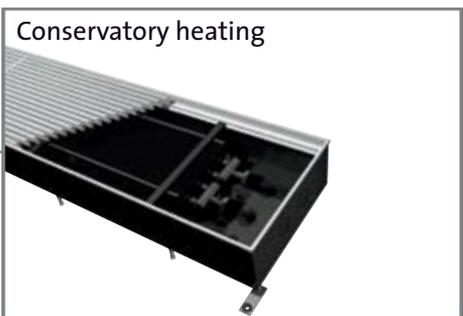
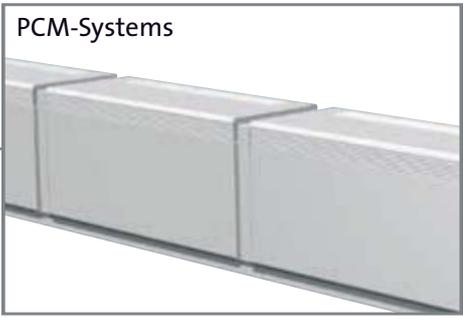
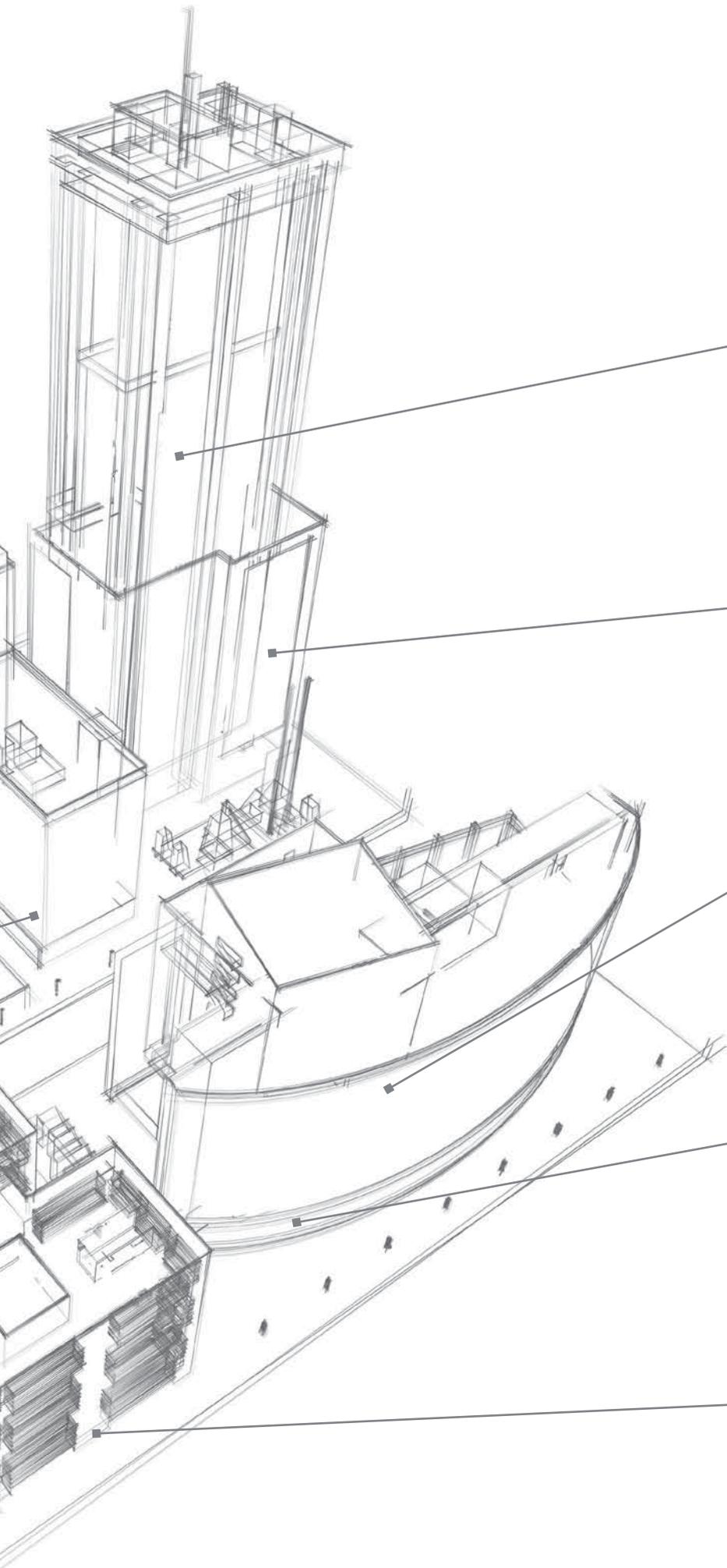


Duct covers, Roll-up grilles



Radiant ceiling systems, chilled ceilings





Well-being is the basic prerequisite for performance, safety and health. When air conditioning closed areas in office and industrial sectors, the system must be tailored specifically to the occupants' needs as well as the structural conditions.

emco started business more than 30 years ago with a series of reliable air diffusers conformant with

For heating, cooling and ventilation there are various components available for floor, wall and ceiling applications. The components were developed in our own development department and can be combined and scaled as necessary to fit the application.

To assist with the layout design, planners are provided with emco's proprietary CAP software pro-

# emco klima

for a pleasant climate

the technological status at that time. emco offers its clients and customers specialised solutions for specific building requirements.

gramme emco heat, emco air, emco ql-tec und emco sound. This useful tool provides a quick and precise display of the respective performance data, airflow and sound level.



# Air is our element

Each large-scale project in modern building automation is always different. The room layouts in these buildings are discharged in various ways, including centralised, decentralised, water-carrying or air-only systems. All systems must guarantee that persons occupying the room will be supplied with primary air. Sophisticated exterior and interior architecture are great challenges to the planning engineers. Through its many large-scale projects, emco has gained extensive experience and thus is capable of providing customers with the best possible solutions for their future projects.



*For more information on this product line, please request the brochure using the fax request form on page 21.*



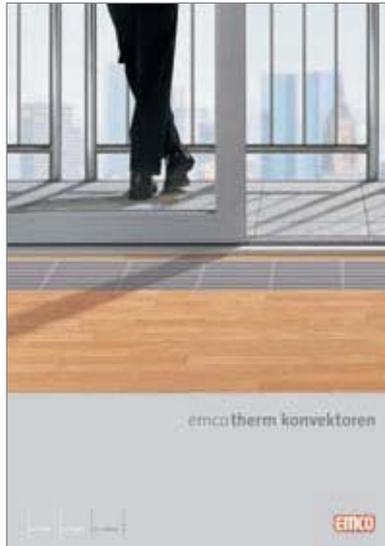
- emco **swirl diffusers**
- emco **ceiling diffusers**
- emco **slot diffusers**
- emco **circular duct diffusers**
- emco **displacement flow diffusers**
- emco **industrial diffusers**
- emco **specialised diffusers**
- emco **floor diffusers**
- emco **dampers and controllers**
- emco **control components**
- emco **grilles**
- emco **air handling systems**



# Always the right system

Heating, cooling and ventilating with convections is gaining significance in air conditioning technology. Transporting energy via water simplifies installation and fitting and gives the architect a higher degree of creative freedom.

Furthermore, the power necessary to transport the energy is considerably less than in standard systems. The economic and environmental advantages are just as clear as the increased comfort and well-being.



*For more information on this product line, please request the brochure using the fax request form on page 21.*

emco**floor** convectors

emco**wall** convectors

emco**standing** convectors

# Good things come from above

Approximately half of the energy consumed in Europe serves to operate buildings, and in order to provide this energy, large quantities of fossil fuels are needed. The alarming effects of global warming are forcing consistent energy-saving policies in all sectors of society.

The ambient climate in a room has a large influence on well-being and thus performance, productivity, accident and illness rates. Modern architecture, a greater number of office machines and computers in the workplace as well as increasing requirements for well-being all place high functional demands on the technology used to maintain the room climate. emco's radiant ceiling systems have a low installation height, which allows a almost unlimited range of architectural freedom. They

also require only low under-temperatures to cool comfortably. This means that emco chilled ceilings can operated with especially environmental energy sources such as ground water as a natural cooling source.

emcochilled ceiling systems for  
gypsum plasterboard ceilings

emcochilled ceiling systems for  
metal ceilings

emcochilled ceiling systems for  
plasterboard ceilings

emcochilled ceiling systems for  
grid ceilings

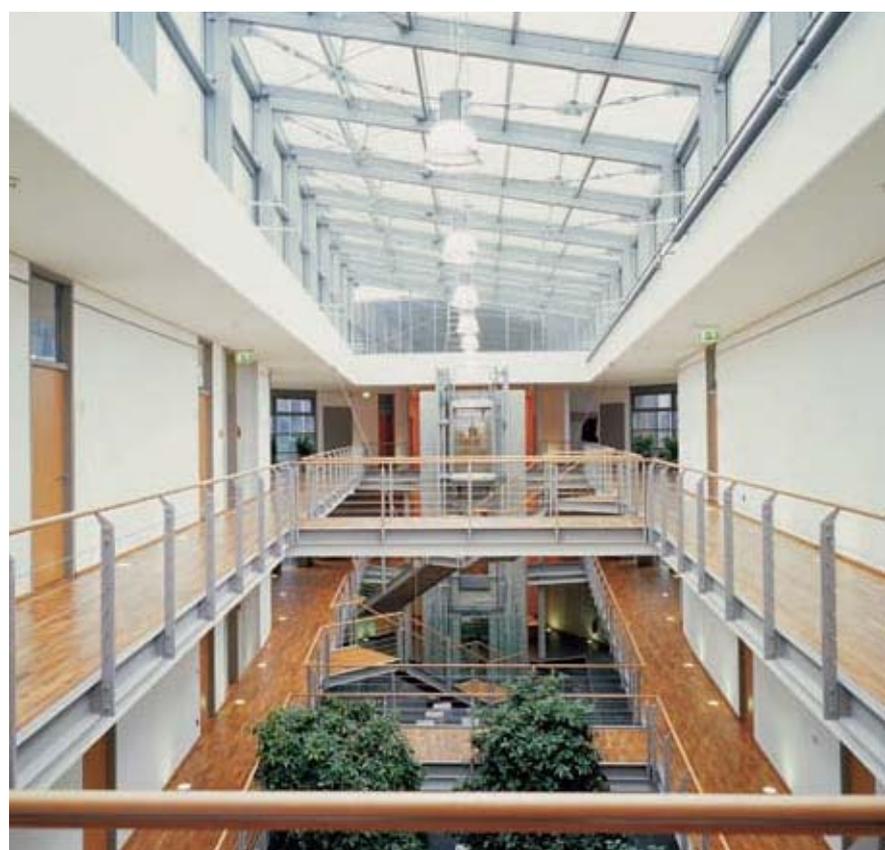
emcochilled ceiling systems for  
radiant sails

emcoceiling convectors



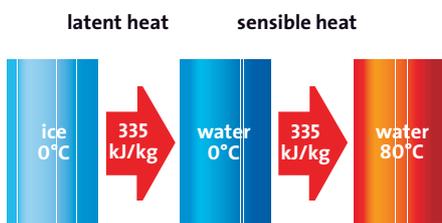
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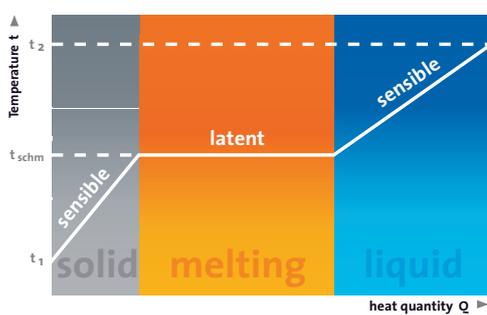




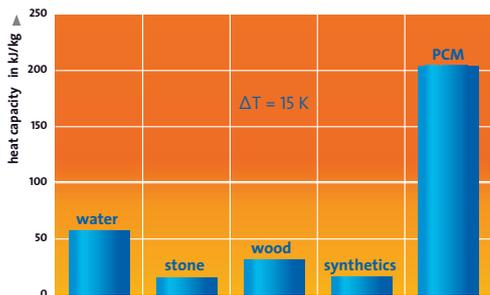
Example of energy demand during water phase change



latent heat storage



heat storage capacity in various materials

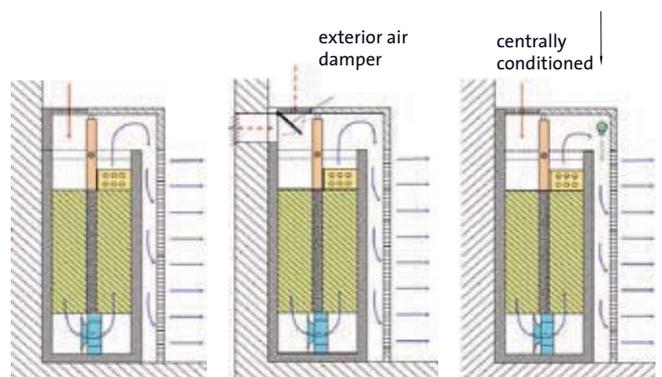


### PCM module perimeter unit with layered exhaust

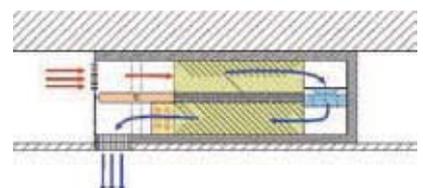
re-circulation mode

Außenluftanschluss

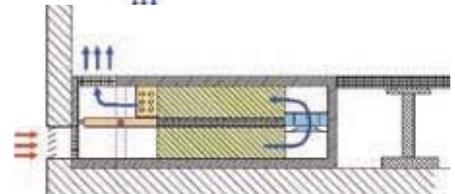
Zentrale Außenluft



PCM module for ceiling installation



PCM module perimeter unit for floor installation



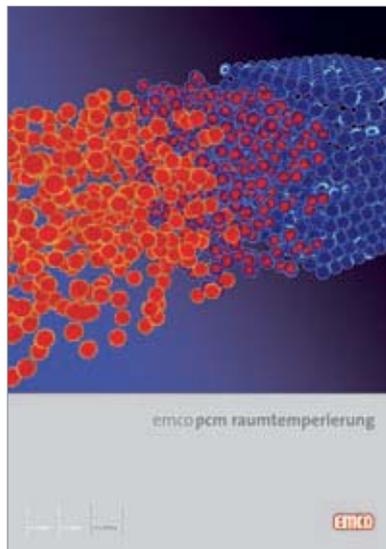
# Phase-Change-Materials – Using the principles of nature

There is a permanent exchange of radiation heat between the earth and outer space. The sun's intensive irradiation warms the atmosphere here on earth, making life on our planet possible.

The heat absorbed by the earth during the day is radiated off the earth again at night, resulting in average temperatures acceptable for our biosphere.

A completely new approach makes systems and devices available which couple the above-mentioned processes and make the energy usable: Phase-Change-Materials. PCM have a melting point of approx. 20 °C. The material can thus be practically frozen during the cool summer nights, only to be melted again for cooling purposes during the day. The high heat

radiation from the sun is stored in the PCM and returned to the cool atmosphere during the following night.



*For more information on this product line, please request the brochure using the fax request form on page 21.*

**emcopcm module**

**emcoactive battery**

**emcopcm chilled ceilings**



## Customised concepts are our forte

Well-being is the basic prerequisite for performance, safety and health.

When air conditioning closed areas in office and industrial sectors, the system must be tailored specifically to the occupants' needs as well as the structural conditions. Decentralised ventilation systems offer both architects and planners a multitude of possible combinations between centralised and decentralised air conditioning systems. Innovative control technology makes it possible to coordinate the control between the various systems.

emco **decentralised**  
ventilation systems



*For more information on this product line, please request the brochure using the fax request form on page 21.*



## Decentralised air conditioning solutions in commercial construction

Air is the number one commodity. Until the 1970s, the idea of ventilation was not considered to be a high priority. This changed with the commencement of the Heat Insulation Ordinance in 1977-1978 as well as the Energy Savings Ordinance in 2002, both acts having effected controlled and energy-saving ventilation. Noise from the street, air and railway traffic are considered by a large proportion of the population to be a disturbance. Normal working, living and sleeping conditions are all subject to stress and other interferences. Changing conditions of daily life set new demands for ventilation technology.



*For more information on this product line, please request the brochure using the fax request form on page 21.*

emco **decentralised window ventilation systems**

**ORIGINAL®  
LÜFTOMATIC**

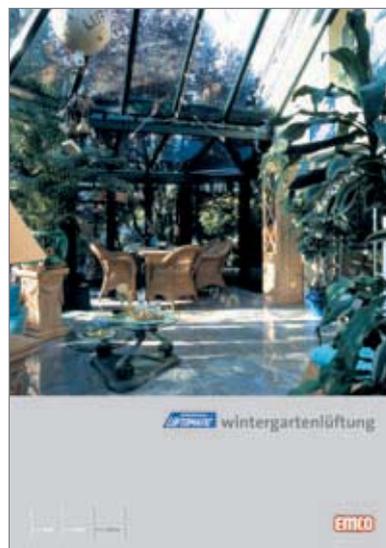


## Comfort through ventilation

Living in harmony with the sun is a modern trend. Conservatories have become even more attractive as an enhancement to existing living space. Improved profiles, glass, ventilation and shading equipment are making them more and more comfortable. The pride of having a „green oasis“ in the home can quickly turn to frustration when for example heat comes excessive.

People and plants need a controlled change of air.

emco has a wide assortment of conservatory ventilation products that all have effective added advantages: Controlled ventilation ensures regulated air change and protection against excess heat and moisture.



*For more information on this product line, please request the brochure using the fax request form on page 21.*

WIGA.top

LDR

LHR

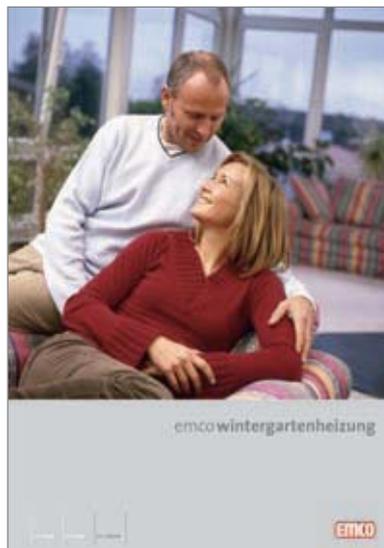
WIGA.vent





## Comfort and warmth in your conservatory

Transporting energy via water simplifies installation and fitting, and the power necessary to transport the energy is considerably less than in standard systems. The economic and environmental advantages are just as clear as the increased comfort and well-being. Because they are an open and accessible area, conservatories are quite attractive additions to any home. Flush-mounting with the floor makes emcotherm floor convectors absolutely ideal for conservatory heating. emco convectors are excellent for screening off cold air, in providing secondary heating or also for use as the primary heat source.



*For more information on this product line, please request the brochure using the fax request form on page 21.*

emco **floor convectors**

emco **control technology**

emco **roll-up grilles**

emco **linear grilles**



# Less energy use and more comfort – starting at the entrance

Air curtains are used in comfort and industrial areas where the entrance is constantly or at least from time to time open and energy loss should be avoided in the zone between cold/warm outside air and warm/cold interior air.

For many years now, Teddington has been researching, developing and manufacturing air curtain systems that provide the greatest possible comfort. Teddington is a long-standing partner of the trade and industry with sales in more than 30 countries.

Teddington Luftschleieranlagen GmbH is a joint venture between emco Bau- und Klimatechnik GmbH & Co. KG, Lingen and Walther Th. Hennecke GmbH, Neustadt (Wied).



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standard air curtain systems  
 design air curtain systems  
 revolving door air curtain systems  
 circular door air curtain systems  
 curved sliding door air curtain systems  
 industrial air curtain systems  
 column air curtain systems  
 noise-reduced air curtain systems



## The Company

Since its founding in 1945, the Erwin Müller Gruppe Lingen has excelled and distinguished itself through continual growth, competence and innovation.

A wealth of ideas, strong business acumen and a caring relationship with its employees have all contributed to the continued positive growth of the company. The distinctive characteristic of products manufactured under the brands EMCO and NOVUS is the synthesis of excellent application benefits and ideal designs.

With this in mind, we strive to achieve a lasting presence in the global market through formal and functional product quality.



## Fax request form

### Use this form to request more information on emco products

If you would like to receive more information on emco's extensive line of products, simply tick the relevant boxes and fax this form to us. We will then post the requested brochures to you.

The product brochures are also available for download in PDF format on our website – visit [www.emco-klima.de](http://www.emco-klima.de).

**Fax-Nr. +49 (0) 591 9140-851**

**e-mail: [klima@emco.de](mailto:klima@emco.de)**

Company: \_\_\_\_\_

Contact: \_\_\_\_\_

Sector: \_\_\_\_\_

Telephone: \_\_\_\_\_

Address: \_\_\_\_\_

Fax: \_\_\_\_\_

Post Code: \_\_\_\_\_

email: \_\_\_\_\_

emco**bad**

- Bath accessoires & interiors
- Price list emco Bath

emco**bau**

- Entrance mats
- Swimming pool grates
- Floor mats

emco**klima**

- Convectors
- Air handling systems
- Grates
- Ventilation components
- Conservatory ventilation / Conservatory heating
- Decentralised ventilation
-  Teddington air curtains
- PCM-Systems
- Radiant ceiling systems
- CDon air conditioning technology with CAP-Programmes and detailed technical product information (PDF)
- Price list air conditioning technology

Place / Date: \_\_\_\_\_

Signature: \_\_\_\_\_

# www.emco.de

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