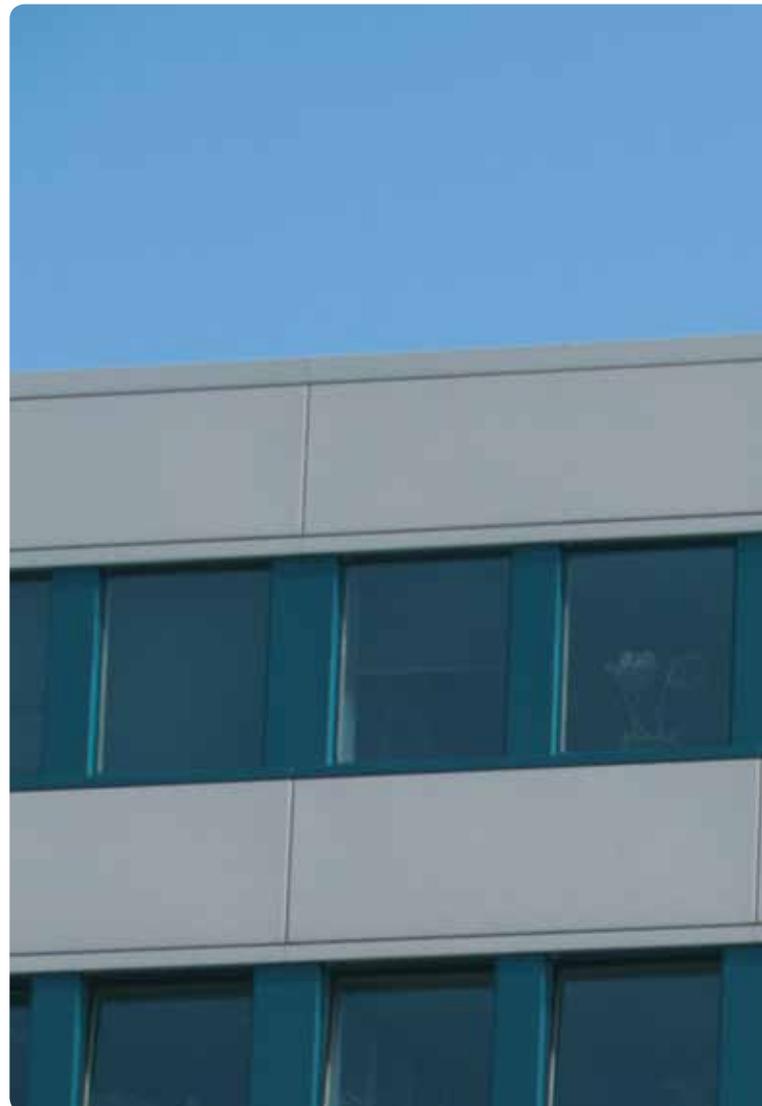




STULZ Group

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Expertise
for superior
technology





*A company with a sense of family:
Jürgen and Albert Stulz are in charge
of the global business of this German
family-run company.*

Expertise

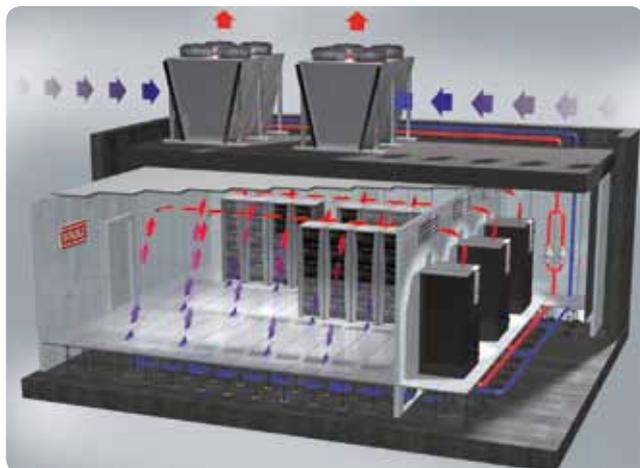
Technical expertise that puts customers first

The companies of the STULZ Group provide cost-effective cooling for data centres, telecommunication systems and production processes. In addition to the air conditioning of medical technology, switch cabinets and offices they also supply high quality system components to the automotive industry.

STULZ stands for engineers who know their business and a sales team who knows about technology. The

teams of the global STULZ family design complex technical systems with expertise and passion, applying the principles of precision, punctuality and partnership. For business customers and partners all over the world. Ensuring that cars run safely, computers compute reliably and telephones connect without problem.

STULZ stands for superior technology engineered in Germany.



At STULZ GmbH, the focus is on the development and manufacture of precision air conditioning systems for data centres and telecommunications.



Montaplast GmbH develops and produces high-quality system components for the automotive industry.





Proximity

Global players need global partners

Today, many companies are active on an international scale. They need a reliable, capable partner who can support them in all markets. This is also true for STULZ customers. Which is why STULZ is now at home in more than 130 countries on every continent.

The STULZ company headquarters in Hamburg coordinates the activities of a large family of enterprises. In Germany alone, the STULZ Group has two production sites and 12 branches with more than 2,000 employees.

A whole world of STULZ – always at hand.

Plants

Europe, America and Asia

The humidity of the tropics and arid heat of the desert require completely different air conditioning solutions from the moderate climates of the Northern Hemisphere. In addition, the demands of Europeans and Americans differ completely from those of Indians and Chinese. Only by producing in the relevant market can you know precisely what your customers want. This is why STULZ has production sites in the world's major growth regions. All over the world, customers put their trust in product lines that answer perfectly to their requirements.

Co-operating globally, producing locally: For every region, STULZ supplies tailor-made products for individual requirements.

Europe



STULZ Germany, Hamburg



STULZ Italy, Valeggio sul Mincio



Montaplast Germany, Morsbach

America



STULZ USA, Frederick, Maryland

Asia



STULZ China, Shanghai

Production sites of the STULZ Group

Europe	Germany, Hamburg	A/C systems
	Germany, Morsbach	Automotive
	Italy, Valeggio sul Mincio	A/C systems
America	USA, Frederick, Maryland	A/C systems
	USA, Frankfort, Kentucky	Automotive
Asia	China, Shanghai	A/C systems
	China, Suzhou	Automotive
	China, Hangzhou	A/C Systems
	China, Tianjin	Automotive
	India, Mumbai	A/C systems



STULZ India, Mumbai



Montplast USA, Frankfort, Kentucky



STULZ China, Hangzhou



Worldwide

From Hamburg to Auckland

STULZ products and solutions can be found on all continents. The first subsidiary outside Germany, which was founded in Amsterdam in 1956, is now part of a large family with 16 international daughter companies – today, STULZ employs more than 5,000 employees around the globe.

In another 120 countries, carefully selected sales and service partners represent the family's good name.

STULZ stands for trust in a strong community.

The companies of the STULZ Group



Air conditioning systems for reliable ICT operation

Australia	STULZ Australia Pty Ltd., Sydney
Austria	STULZ Austria GmbH, Wien
Belgium	STULZ Belgium
China	STULZ Hangzhou
	STULZ Air Technology Systems (Shanghai) Co. Ltd.
Germany	STULZ GmbH, Hamburg (Headquarters)
France	STULZ France S.A.R.L., Croissy-sur-Seine
Great Britain	STULZ UK Ltd., Epsom, Surrey
India	STULZ-CHSPL (INDIA) Pvt. Ltd., Mumbai
Italy	STULZ SpA, Valeggio sul Mincio
New Zealand	STULZ New Zealand Ltd., Auckland
Netherlands	STULZ Groep B.V., Amstelveen
Poland	STULZ Polska Sp. z.o.o, Warschau
Singapur	STULZ Singapore PTE. LTD.
Spain	STULZ España, S.A., Madrid
South Africa	STULZ South Africa (Pty) Ltd.
USA	STULZ Air Technology Systems Inc., Frederick, Maryland



System components for the automotive industry

Germany	Montaplast GmbH, Morsbach (Headquarters)
	Montaplast, Sindelfingen
	Montaplast, Munich
Great Britain	Montaplast, London (Sales Office)
France	Montaplast, Paris (Sales Office)
China	Montaplast Co. Ltd., Tianjin
	Montaplast (SIP) Co. Ltd., Suzhou
Japan	Montaplast of Japan Ltd., Nagoya
USA	Montaplast of North America Inc., Frankfort, Kentucky
	Sales & Engineering Office Detroit, Michigan



Experience

A system for success

The first customers for STULZ products were housewives. In the midst of the economic miracle enjoyed by Germany in the 1950s, Albert Stulz Sr., who had founded his company in 1947, introduced the Piccolo housekeeping system. The Piccolo combined a vacuum cleaner, floor-polishing brush and blender in a single appliance. A million of these appliances were sold in no time – and at a price that ordinary people could afford. The addition of a plastics processing plant in 1959 led to the creation of Montplast, today a global supplier to the automotive industry.

In 1971, STULZ began to specialise in the air conditioning of data centres. In 1977, STULZ produced precision air conditioning systems with a modular design – a groundbreaking innovation, which established the company's international reputation as a specialist for the air conditioning of data centres and mobile phone stations.

Customer focus, entrepreneurial spirit and technological expertise – these have formed the basis for the successful growth of the STULZ Group for over 60 years.

1947

Foundation of the "ALBERT STULZ Fabrik elektrotechnischer Geräte" (ALBERT STULZ Electrical Appliance Factory) on 31 July 1947

1956

Foundation of the subsidiary in the Netherlands, the beginnings of internationalisation

1965

The first STULZ produced air conditioning systems: STULZ electronic air-system

1977

A revolutionary innovation: modular precision air conditioning systems

1987

Foundation of STULZ America Inc. in the USA

1992

Foundation of Montplast of North America in Frankfort, Kentucky

1954

Foundation of ELECTRO-AS GMBH, a marketing company for the direct sale of the Piccolo to private households

1959

Plastics processing expands with the foundation of Montplast GmbH

1971

STULZ specialises in the air conditioning of data centres

1985

Foundation of STULZ Italia S.r.l.

1989

Foundation of STULZ FRANCE S.A.R.L. and STULZ UK Ltd. in Britain

2001

Foundation of STULZ España S.A. and STULZ Air Technology Systems, Inc. in Frederick, USA, majority share in Cosmotec Italia (now STULZ SpA)



The first major success for STULZ is the Piccolo. This practical, universal appliance incorporates a vacuum cleaner, floor-polishing brush and blender in a single system.



The production of the casing for the Piccolo led to the creation of Montplast GmbH in 1959, which produces plastic components – initially for household appliances, today for the automotive industry.



The very first STULZ A/C system from 1965 already boasted all the characteristics that would make STULZ the world's leading supplier of energy-efficient air conditioning systems. The STULZ electronic air-system cools and humidifies, it is compact and expandable at any time.



The system trend advances: In 1971, STULZ begins to specialise in the cooling of data centres. STULZ is the first supplier to introduce precision A/C systems with a flexible, modular design. This innovation puts the company years ahead of the competition.

2003

Foundation of STULZ Polska Sp. z o.o.

2006

Launch of the joint venture STULZ CHSPL Pvt. Ltd. in India and foundation of Montplast in Suzhou, China

2008

Foundation of STULZ South Africa (Pty) Ltd.

2012

Development of STULZ high-end chiller for data centres. Expansion of production capacity at STULZ Headquarters

2013

Development of STULZ CyberBlue. The world's first precision air-conditioning system for data centres that uses water as a refrigerant

2005

Majority share in STULZ AUSTRALIA Pty Ltd., foundation of STULZ Air Technology Systems (Shanghai) Co. Ltd.

2007

Foundation of STULZ New Zealand Ltd.

2011

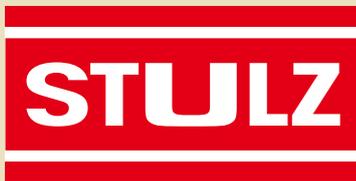
Enhancement of Hamburg site with new administration and customer centre

Foundation of STULZ Austria GmbH and STULZ Singapore Pte Ltd.

Expansion of Stulz in China through additional site in Hangzhou

Expansion of Montplast in China through additional site in Tianjin

Foundation of STULZ Belgium



Efficient and controlled air conditioning

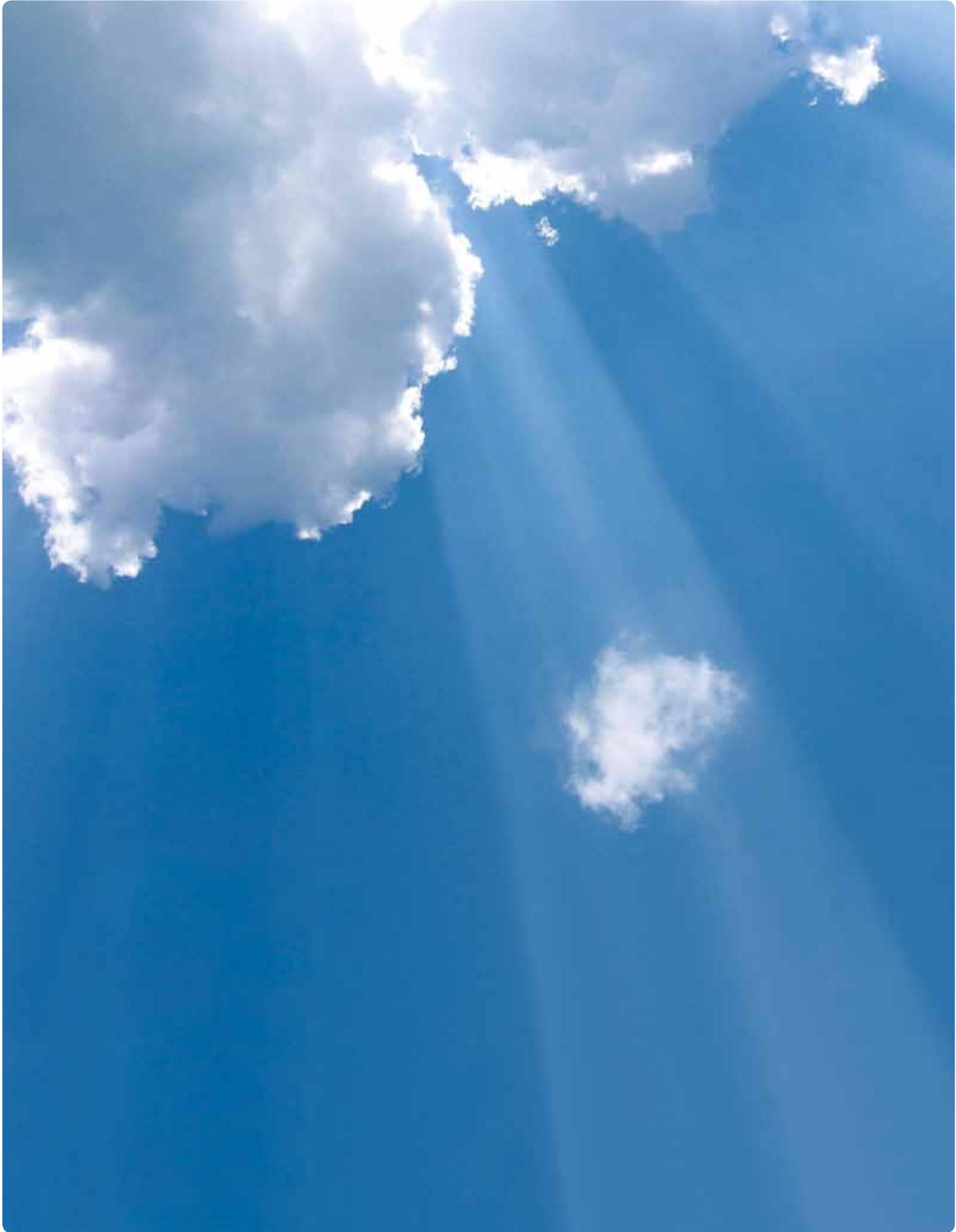
As a leading supplier of energy efficient air conditioning technology, when it comes to the cooling of sensitive information and communications technology, the name STULZ is synonymous with quality. Modern environmental systems from STULZ ensure that data centres and mobile phone stations continue to perform reliably – 24/7, 365 days a year.

Moreover, since 1969 STULZ has been the exclusive sales partner of MITSUBISHI Heavy Industries Ltd. in Germany for comfort air conditioning systems.

For the protection of sensitive technology, an ideal climate for people and a responsible attitude to the environment, STULZ is the natural choice.



Global players need
global partners



Air conditioning

A stable climate for people and technology

It should not be too hot or too cold. So air conditioning systems control the temperature, humidity, air flow and air quality. What appears so simple is actually quite complex in terms of thermodynamics. For the design of an air conditioning system depends not only on the heat distribution, outside temperature, room size and air conduction, but also on actual use. And of course, energy usage, CO₂ emissions and costs should be kept to a minimum.

STULZ is the expert here. Our systems have been the natural choice for more than four decades: with precision air conditioning for reliable processes in IT, telecommunications and industrial production, and comfort systems for home and office, too.

Whether you need availability for IT and mobile phones, stable conditions in production or an agreeable climate for work or leisure – STULZ offers tailor-made air conditioning for every situation.



Data centres and mobile phone stations have to be air conditioned because computers radiate a great deal of heat as they work. Precision air conditioning systems reliably keep the temperature in the ideal range of 18 to 27 °C – the ideal working environment. They move around 300 cubic metres of air in order to convey 1 kilowatt of heat to the outside.



In industrial production, heavy-duty cooling systems protect machines from overheating, and humidification and dehumidification systems keep moisture-sensitive production processes and systems up and running. The systems are tested exhaustively at STULZ test centres.



Wherever people live and work, comfort air conditioning systems provide pleasant temperatures and fresh air for wellbeing and improved performance.

Advice

Think before you act

Energy efficiency, room size, noise protection and local climate – when it comes to the precise air conditioning of sensitive information and communication technology, every customer has his own special requirements.

This is why STULZ experts first carry out a detailed examination of heat loads, room design and air conduction. Only after this do they design a made-to-measure solution: closed-circuit cooling systems with compressor and thrifty free cooling for maximum energy efficiency, or usage-based liquid cooling systems for the precisely targeted air conditioning of high density computers.

Whether you are building, renovating or converting – STULZ has an individual solution for every requirement and every room size. With expert insight and experience, our specialist engineers produce concepts for systems, implementation and service.

Knowledge based on experience: For competent advice, no one equals the STULZ air conditioning consultants.



STULZ room tuning optimises your energy usage quickly and effectively. Your data centre can then breathe freely. Cooling capacity is put to more effective use, and energy consumption drops.



Comprehensive advice with cost-efficiency and energy calculations, suggestions for expansion, renovation and construction and information on environmental and safety regulations.



Parameters for cooling capacity, temperature, humidity, air flow and noise levels are selected in the STULZ planning support programme to assist with the design and implementation of made-to-measure A/C systems.



Innovation

If it's good, it could be better

What are customers and partners saying? What are the expert opinions? What innovations are suppliers working on? STULZ products are continually put to the test. Interdisciplinary planning sessions by Sales, Production and Development come up with innovations to make air conditioning technology more efficient, more durable and lower-maintenance.

In the 70s, STULZ invented the highly flexible modular system for precision air conditioning, in the 80s the company became the pioneer of energy-saving ultrasonic humidification, in the 90s STULZ developed especially low-noise, space-saving products, and in the new millennium, STULZ is cutting electricity consumption with direct drive, variable speed EC fans and electronic expansion valves. STULZ engineers' latest achievement is Indirect Dynamic Free Cooling and Direct Free Cooling, which selects the ideal operating mode for the air conditioning system, based on heat load and outside temperature. This loss-free control achieves electricity savings of up to 90 %.

CyberBlue, our vision: energy-saving data centre air conditioning without chemical refrigerants.

From the prototype to a future-proof chilling process for data centres.

The handling of chemical refrigerants is subject to strict regulations. Legislation requires not only expensive structural measures, but also regular leak tests and meticulous disposal. Our aim is to gradually develop alternatives, and to support data centre operators on the road to greater sustainability. That is why STULZ is investing in trials of a new, environmentally friendly chilling technique. The objective of the "Water Inside" technological initiative is to replace chemical refrigerants in the circuits of precision air-conditioning systems with pure water (R718).



STULZ CyberBlue



Electronically controlled EC fans run particularly efficiently in partial load mode. In the event of failure, they automatically offset gaps in performance.



STULZ is the inventor of modular precision air conditioning – a prerequisite for the individual design of A/C systems.

Precision

Expertise for sensitive technology

Air conditioning products and applications from STULZ benefit from over 40 years of experience with literally thousands of projects and products – expertise that is appreciated by customers all over the globe.

STULZ CyberAir and STULZ MiniSpace precision air conditioning systems maintain the ideal temperature for sensitive hardware in server rooms and data centres precisely to the last degree. Designed for failure-free continuous operation, they work accurately, reliably and exceptionally economically. The sturdy, compact STULZ Telecom-Line keeps mobile phone network base stations cool, whatever the weather. And STULZ CyberCool 2 chillers rely purely on water for particularly energy-efficient cooling.

STULZ specialises in the manufacture of flexible, customised solutions. Whether you require a combination of closed-circuit and liquid cooling, scalable, compact modular systems or an intelligent electronic processor for maximum energy efficiency, STULZ engineers develop the ideal system for every requirement.

Selected suppliers, high-quality materials, meticulous assembly and reliable, ever available customer service all ensure that STULZ air conditioning systems enjoy a long, failure-free working life.

Innovative product development is at the heart of the STULZ success story. When it comes to manufacturing expertise STULZ is a first choice for the precise, reliable and cost-effective control of heat loads in the information and technology sector.

CyberRow Intelligent air flow control – for greater efficiency in rack cooling

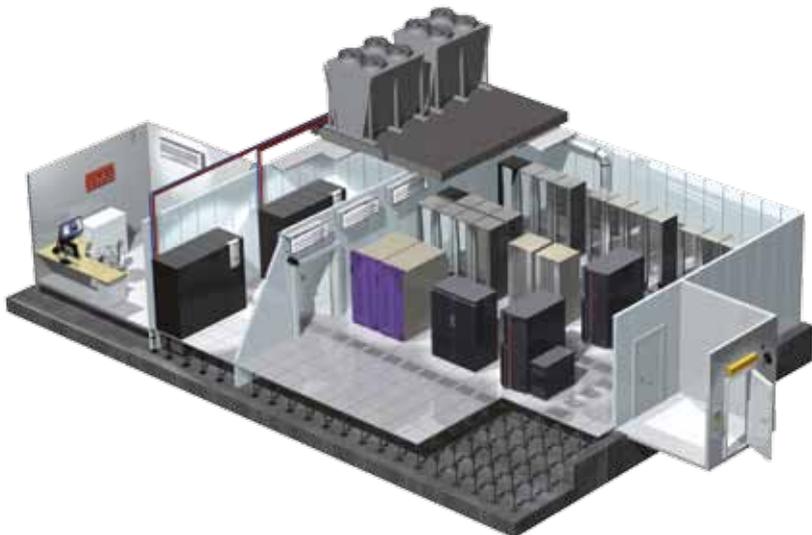


STULZ CyberHandler for the energy-saving air conditioning of data centres





Peer-to-peer for keeping computers cool: STULZ CyberAir comes with 7 different cooling systems and up to 20 cooling units in one system.



High-priority data centres must achieve 99.999 % availability – which means a maximum of 5 minutes and 16 seconds of downtime a year. STULZ ensures availability by precisely adapting the air conditioning to the computing power.



IT cooling

Full availability in all situations

The digital revolution is advancing in leaps and bounds and has long since permeated all aspects of our lives. Modern computers in data centres control processes that are critical to business 24/7, 365 days a year. Since computers only work reliably at temperatures between 18 °C and 27 °C, they have to be cooled. The more efficient this cooling, the less electricity the data centre consumes.

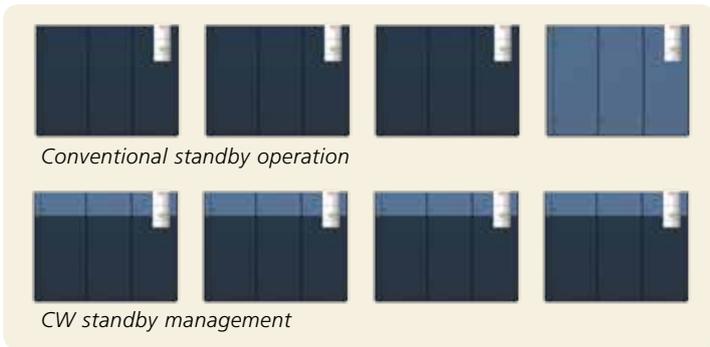
Whether in a closed circuit or through direct cooling of the high-density rack – STULZ precision air conditioning ensures maximum IT availability at minimum running costs. Designed for failure-free, continuous operation over many years, STULZ air conditioning systems work quietly, reliably and with exceptional energy efficiency.

Data centre air conditioning from STULZ – when high availability matters.

Energy is expensive and data centres need an awful lot of it. It is common for more than half of this energy to be expended for the air conditioning alone. STULZ Free Cooling gets rid of energy gluttons and lowers ongoing running costs of the A/C units by up to 90 %.

Fluctuating server rack loads, space restrictions, lack of a raised floor, existing server technology – these are exactly the tricky situations from everyday practice that CyberRow has been specially developed to deal with. CyberRow is a standalone A/C unit and is installed and operated independently of the rack. It can be used with racks from any manufacturer. This complete separation of the rack and the A/C unit enhances reliability and provides greater flexibility in data centre layout.





CW standby management keeps all the A/C units of liquid cooled, closed-circuit A/C systems in perfect balance in energy-saving partial load mode. Redundant standby units are incorporated in controlled system operation.



Electronically controlled EC fans react steplessly to changing output requirements, deliver precisely the air flow that is needed and achieve considerable energy savings in partial load mode.

Energy efficiency

IT cooling is greener than ever

Worldwide, the production of electricity for IT infrastructure generates as much CO₂ as air traffic. And data centres are responsible for a large proportion of this. In the worst cases, their air conditioning alone accounts for more than half of the required electricity.

Just a single kilowatt of saved electricity cuts CO₂ emissions by around 620 grams. Innovations from STULZ help to lower the energy consumption of data centres to the maximum level that is technically feasible.

Technology such as EC fans, CW standby management and Indirect Dynamic Free Cooling and Direct Free Cooling make STULZ a pioneer in the field of energy-efficient air conditioning technology. Electronically controlled components and control systems regulate the cooling capacity precisely and immediately.

And with our "Mission Energy" initiative, STULZ tells users how they can reduce electricity consumption in their data centres by up to 40 % through structural optimisations and modern air conditioning systems.

Energy efficiency in the data centre – with air conditioning systems from STULZ.



Just a few minor, relatively low-cost optimisations can dramatically reduce the electricity consumption of the data centre air conditioning system. STULZ advises users, and even the European Union is availing itself of our specialist expertise in its compilation of a guide to the energy-efficient running of data centres.



Indirect Dynamic Free Cooling combines compressor cooling and free cooling in four stages in all, and automatically searches for the most economical operating mode. With utmost sensitivity and precision, Indirect Dynamic Free Cooling selects the most energy-saving mode, and controls compressors, EC fans in indoor and outdoor units and pumps, all on the basis of the outside temperature and heat load.



STULZ Direct Free Cooling combines compressor cooling and Direct Free Cooling, thus reducing compressor running times to a minimum. Depending on the ambient temperature, the system always selects the optimal operating mode: either 100 % Direct Free Cooling or a combined operation using the compressor. Only once the temperature exceeds 24° C will the system automatically switch solely to compressor mode. As is the case with the Indirect Dynamic Free Cooling system, all compressors, EC ventilators, outdoor units and pumps are controlled and monitored under Direct Free Cooling.

Industrial cooling

For production that never stops

Heavy industrial machines obtain their driving power from electric motors and their instructions from electronic components. They cut metal, press components and perform other heavy-duty work in industrial production, in a tough, never-ending routine. If the machine gets too hot, all parts wind down and production grinds to a halt.

Italian subsidiary STULZ SpA has been offering a wide range of products for industrial cooling since 1989. Its sturdy industrial liquid coolers and cooling systems for switch cabinets and equipment rooms provide safe, reliable cooling even when the surrounding air is permeated by explosive substances such as dust, chips and oil mist.

Reliable and stable under heavy load – all over the world, engineers rely on industrial cooling from STULZ.



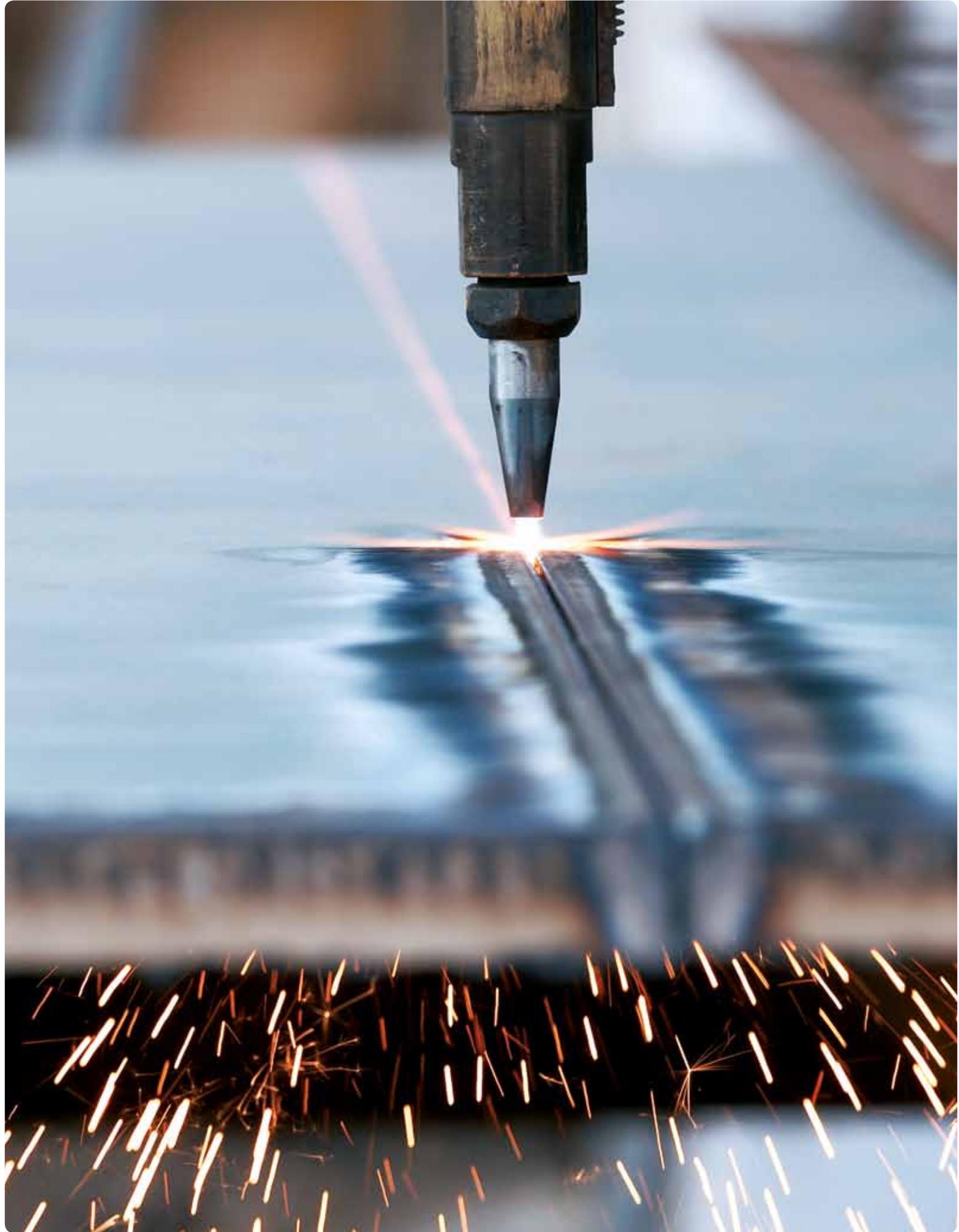
Liquid heat exchangers for cooling industrial machines are produced by STULZ SpA in Italy and sold worldwide under the Cosmotec brand.

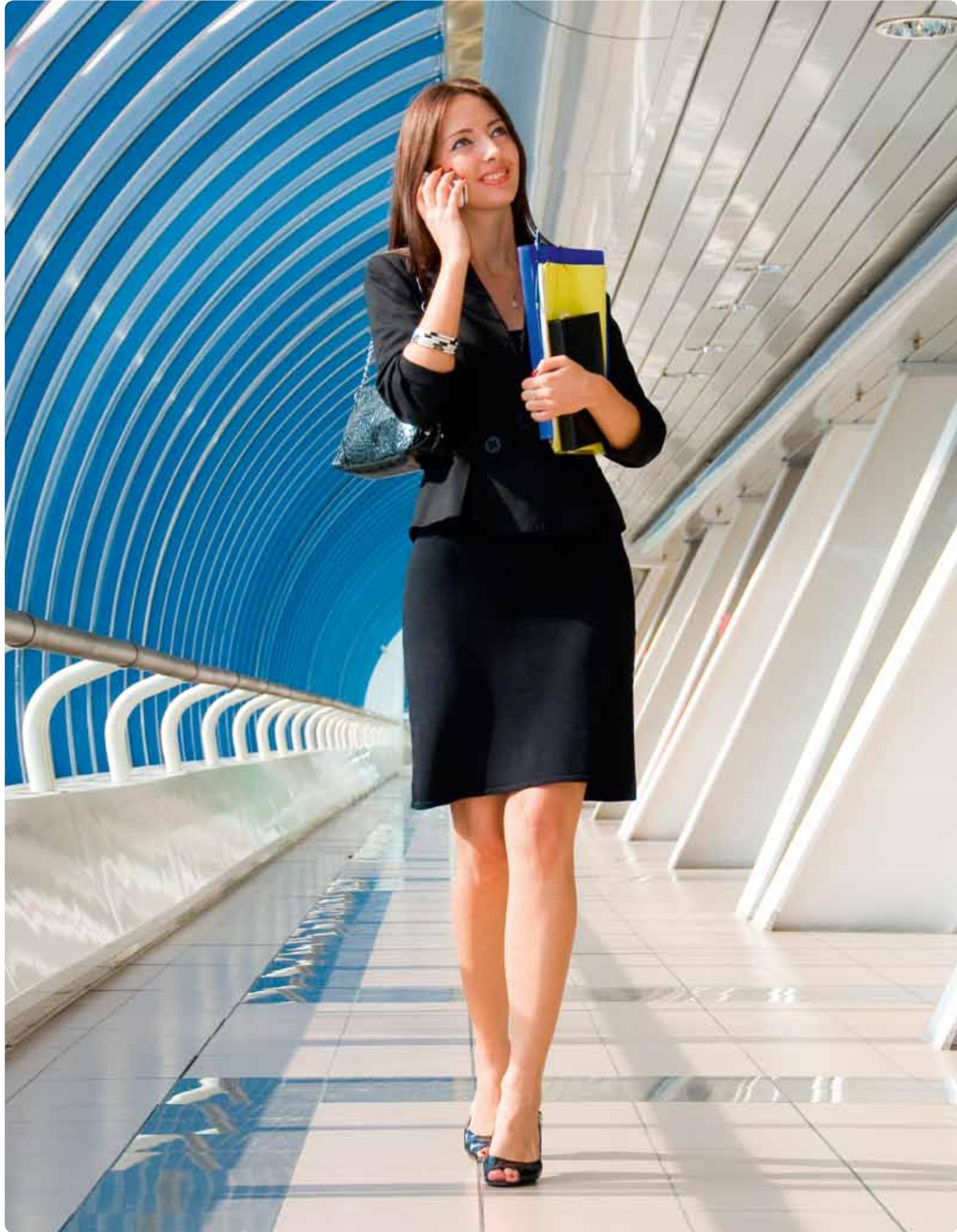


STULZ A/C systems for industrial cooling are available in numerous product versions, including compressor cooling systems and air/air or air/water heat exchangers. Self-cleaning filters cut maintenance times to a minimum.



STULZ SpA offers a broad range of filter fans under the brand Kryos, which are employed as a low-cost cooling solution.





Telecom air conditioning

Stay well connected

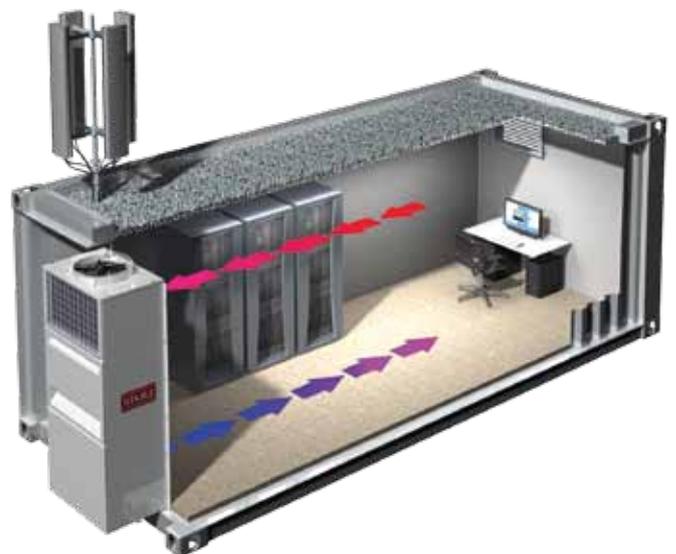
Make phone calls when you want, from any place on Earth – today, wireless mobile phone networks are available all over the world. Their transmitting and receiving stations are erected on roofs, towers and masts. Squeezed into containers, shelters and switch cabinets, transmission equipment converts almost all electrical energy into heat. If it gets too hot, the sensitive equipment can suffer disturbances or even break down – the network collapses.



STULZ air conditioning systems for Telecom-Line keep the operating temperature of sensitive transmission equipment at a stable level. Compact and sturdy in design, economical in operation, they keep receiving and transmitting stations cool whatever the weather.

It is good to know: air conditioning systems for telecommunications from STULZ maintain the availability of mobile networks worldwide.

STULZ keeps transmission equipment large and small in mobile phone networks cool – from inside, outside or in combination. Containers, shelters and switch cabinets are cooled with precision – come rain or shine, economically, reliably and durably.



Comfort

A climate that is good for your body and soul

Room air conditioning systems increase wellbeing, immune defences and performance. They provide gentle, draught-free air conditioning; filters for pollen, dust, odours and bacteria reduce the risk of allergic reactions.

As the exclusive sales partner for the well-known manufacturer MITSUBISHI Heavy Industries Ltd. in Germany, STULZ has been supplying a wide range of energy-efficient comfort air conditioning systems since 1969. These state-of-the-art systems use thrifty heat pump and inverter technology, cooling in summer and heating in winter.

For an ideal climate in large buildings, the CompTrol monitoring and management system developed by STULZ efficiently controls the network of distributed comfort air conditioning systems from MITSUBISHI Heavy Industries Ltd.

Lasting energy efficiency, professional installation with quality and craftsmanship – with STULZ, a good climate is assured.

Our partner network of expert cooling and air conditioning installation engineers across Germany, Austria and the Netherlands provides excellent advice, reliable service and long-term energy efficiency.



Regular technical training courses keep specialist air conditioning fitters right up to date. At the STULZ Klimatage, the industry holds lively discussions about technical trends and innovations.



Specialist air conditioning companies throughout Germany perform professional, environmentally friendly installation in offices, shops, restaurants, hotels, bedrooms and attics.

Electronics

More efficient system control

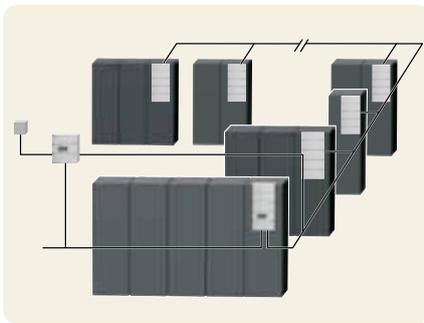
Many innovations are based on the sophisticated use of information technology. This also applies to STULZ air conditioning systems.

The STULZ cooling system processor, which is the electronic control centre for each precision air conditioning unit, records all operating states and provides the data input for the unique STULZ DFC (Dynamic Free Cooling) automatic air conditioning system. DFC precisely selects the most energy-saving mode depending on the outside temperature and heat load, and sounds the alarm in the event of problems. Air volume, air flow, external pressure, noise level and cooling capacity are adapted continually and precisely to room conditions.

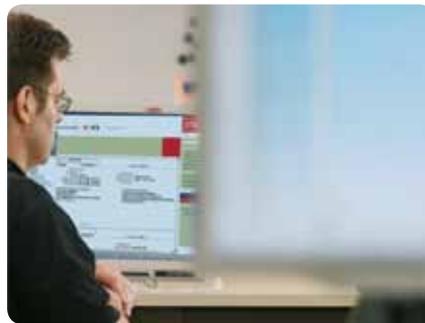
STULZ CompTrol software and hardware seamlessly integrates air conditioning and humidification systems from STULZ and MITSUBISHI Heavy Industries Ltd. in all building management systems. Graphic user interfaces for diagnosis and remote control display operating states clearly and comprehensively.

STULZ Service acquires data for service orders via PDA. Customers can call up their current status on the Internet at any time via the STULZ Service Portal.

Energy-efficient operation, integrated building automation and transparent service – with efficient electronics from STULZ.



In data centres, up to 20 precision A/C units are combined in a peer-to-peer network – fully integrated in standard bus systems, networks and control rooms of central building management systems.



In large properties, the STULZ CompTrol controls and monitors up to 800 comfort A/C units from MITSUBISHI Heavy Industries Ltd. Measured values are recorded in real time and can be retrieved at any time.



The "Computerwoche" magazine and IT consultancy firm Gardner Consulting chose STULZ as a finalist for the "User of the Year" award in 2007. Using PDA, STULZ Service records all service work carried out on the unit via the EAN code. Current status is available at any time via the STULZ Service Portal on the Internet.







Humidification

Humidity optimises processes

In data centres and chip factories, printing presses, lithographers, photo labs and electronics plants, computer rooms, chemical and pharmaceutical laboratories, the textile and leather industries and many other places as well, highly efficient humidification systems from STULZ optimise production processes in plastics, paper, textiles, leather and wood. They keep food fresh, preserve books and works of art from disintegration and generate steam for saunas. Smaller systems provide agreeably fresh air at home and at work.

STULZ ultrasonic humidifiers have been in use around the world for more than two decades.

Humidification from STULZ, with steam systems for maximum hygiene and atomising systems for maximum energy efficiency.



Humidifiers for every application: steam humidifiers function according to the immersion heater principle, nozzle-type humidifiers atomise cold water into fine drops, ultrasonic humidifiers use oscillations for immediate water nebulisation.



The STULZ ULTRASONIC® humidifying system works without time delay and requires up to 93 % less electricity than conventional steam humidifiers.

Dehumidification

Industrial Applications

In many industrial applications, life without dehumidification systems would now be inconceivable. In the production of pharmaceuticals, baked goods, candies and many other products from everyday life, the humidity in the air must be maintained at precisely the specified level.

Restoration Applications

In addition, dehumidifiers protect perishable stored goods from mold and decay. Mobile units drive water vapor out of commercial buildings like hospitals, universities and theatres, and gently get things back in order following water damage. In exceptional circumstances such as flooding, large mobile machines are deployed.

STULZ dehumidification systems – the top choice for humidity control.





In the event of a flood, large mobile dehumidifiers from STULZ help to repair all water damage quickly and permanently.



The powerful DESICAIR series from STULZ-ATS dehumidifies buildings and industrial production processes. Hygroscopic materials on a circular media extract the humidity from the air.



STULZ USA, Frederick, Maryland

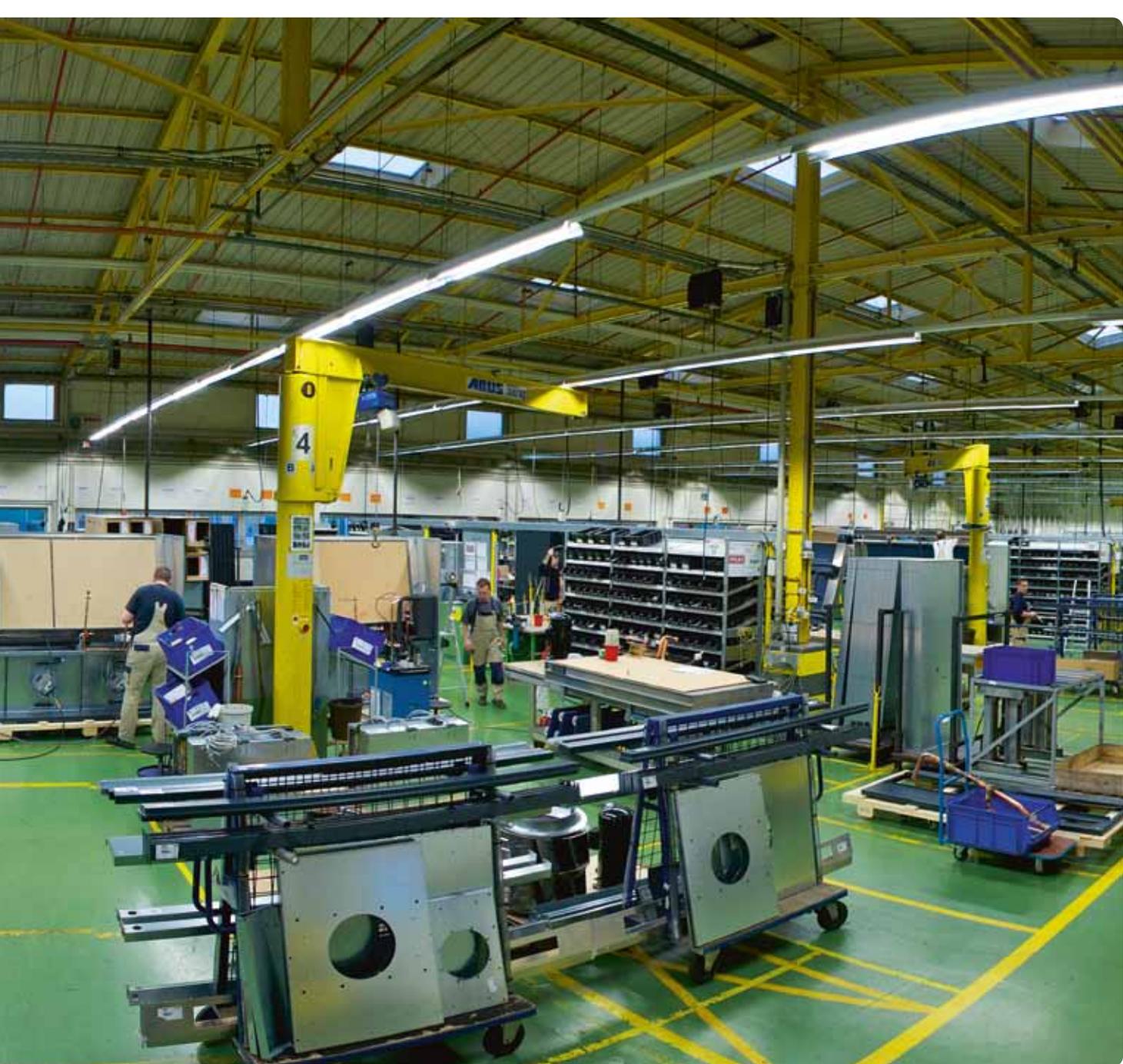


STULZ Germany, Hamburg



Production islands enable the manufacture of superior-quality, customised systems. Quality inspectors and electronic monitoring systems survey every step of production.

STULZ China, Shanghai



STULZ Italy, Valeggio sul Mincio



STULZ India, Mumbai

Production

Flexible processes, individual solutions

STULZ produces to order, individually for each customer. Every project brings different requirements, every climate requires different technologies, every customer has different needs. Simple production-line work does not come up to scratch. Each STULZ air conditioning system is unique; it is individually designed, manufactured, adapted and serviced.

Interdisciplinary teams of skilled employees and engineers accomplish customer orders with meticulous precision and specialist expertise. They assemble high-quality components with diligence and care on production islands. Quality inspectors and electronic monitoring systems supervise every step of production. Production plants in Germany, India, China, the USA and Italy take care of customers' requirements on a local basis: products conform to the market and are delivered on time with few transport miles.

The result of our comprehensive quality assurance system is air conditioning systems of the highest quality, which continue to perform reliably and cost-effectively even after decades.

Just in time: a refined logistics system takes care of transport via air, land or sea. The A/C system arrives at the customer's site exactly when he wants it – anywhere in the world.



Quality

Test cases for an emergency

No one can afford mistakes, and STULZ customers least of all. For STULZ precision air conditioning systems ensure the availability of communication and information technology around the clock. Before they commence their work for the customer, they have already survived an extensive test round. At the STULZ Test Centre, climatic chambers perfectly simulate the environmental conditions at the future place of use. The switching and control functions of the air conditioning system are tested exhaustively and configured to suit individual customer needs. Test plans ensure uniform test procedures.

Quality is king: All STULZ products and services are certified to ISO 9001:2000. A comprehensive quality assurance system covers development, production, implementation and service. Inspectors check not only ongoing production but suppliers' processes and products as well.

Every STULZ air conditioning system is individually tailor-made to the customer's requirements. But the aim is always the same: superior quality for satisfied customers.





Putting air-conditioning and refrigeration technology to the test: Even during the planning phase, with temperature

ranging from -20 °C to +45 °C, the STULZ Test Centre simulates the load conditions of the planned A/C system –

Ensuring high availability and creating transparency



Ready for an emergency: a central emergency phone number, automatic emergency call systems and a 24/7 emergency service provide rapid assistance with problems. STULZ supplies the spare parts for customers in Germany from spare parts stores in Frankfurt and Hamburg.





Service

Building management – we've got it covered

Service at STULZ means a great deal more than a bit of assistance with problems in your air conditioning system. Today, customers all over Europe hand over the entire responsibility for facility management to STULZ.

Around the globe, the highly qualified service technicians of our STULZ Global Service take care of the operation, inspection, maintenance and repair of building management equipment. Their work is not restricted to monitoring air conditioning systems, but also covers ventilation, electrical, heating and sanitary equipment, access monitoring systems and fire safety facilities. Our STULZ subsidiaries and about 120 reliable partners enforce the STULZ promise of service worldwide. As your outsourcing partner, STULZ also takes on central service management for all the sites of global players.

Service from STULZ – worldwide, around the clock – a guarantee for the reliable operation of air conditioning and building management systems.

The STULZ Global Service boasts a worldwide network of production sites, subsidiaries and service partners, enabling us to provide services for international companies everywhere.

The digital service chain begins with the EAN code of building management hardware, continues onto the Internet via our service technicians' PDAs and culminates in the STULZ Service Portal for customers. Service orders are recorded comprehensively, dealt with rapidly and documented transparently.



Customers

For more than 40 years, we at STULZ have focused our efforts on air conditioning equipment for data centres and mobile phone networks. Products and services from STULZ embody a wealth of experience gathered from many thousands of projects. This experience ensures that air conditioning systems from STULZ perform reliably and economically for many years.

That is why more and more companies all over the world put their trust in air conditioning technology made by STULZ.

A B C D E F G H I J K L M

A

ADNOC, UAE, **Air Traffic Control Centre**, UAE, **A.I.S.**, Thailand, **Alcatel**, France, **Alcatel**, Switzerland **Alestra Telecom**, China, **American Express**, New York, NY, **American Express**, Seattle, WA, **Andersen Consulting**, Great Britain, **ARAL Aktiengesellschaft**, Germany, **Asia Global Crossing**, Singapore, **AUDI NSU/Auto Union AG**, Germany, **AT&T**, Cedar Knolls, NJ, **AT&T**, San Francisco, CA, **Atlantic Hotel**, Germany, **AXA Financial**, Chicago, IL, **Axel Springer Verlag**, Germany, **Axis Telecom**

B

BBC-Cardiff, Great Britain, **Bell Telephone**, Great Britain, **Banca Popolare di Novara**, Italy, **Banco de Santander**, Italy, **Bankers Trust**, New York,

NY, **Bank of America**, Germany, **Bank of America**, Great Britain, **Bank of America**, Japan, **Bank of England**, Great Britain, **Bank of Montreal**, Montreal, Quebec, **Bank of New York**, New York, NY, **Banque Générale**, Luxembourg, **Banque la Sogenal**, Germany, **Bloomberg**, Great Britain, **BMW Bayerische Motorenwerke AG**, Germany, **British Telecom**, Great Britain

C

Celcom, Malaysia, **Cellnet**, Great Britain, **Cellis FTML**, Lebanon, **Chase Bank**, New York, NY, **Chase Manhattan**, New York, NY, **China Netcom**, China, **Christiana Bank og Kreditkasse**, Norway, **Cisco Systems**, Ottawa, Ontario, **Citibank**, Chicago, IL, **Citibank**, New York, NY, **Colt Internet**, Switzerland,

Colt Telecommunication/Delta t, France, **Columbia University**, New York, NY, **Comit**, Italy, **Commercial Union**, Italy, **Cosmote Telecom**, Greece, **Crédit Lyonnais**, France, **Crédit Mutuel**, France, **Credit Suisse**, Great Britain, **Credit Suisse First Boston**, Australia, **Cyprius Telecom CYTA**, Cyprus, **Czech Telecom**, Czech Republic

D

Daimler-Benz AG, Germany, **Debitel**, Netherlands, **DeTeMobil**, Netherlands, **Deutscher Ring**, Germany, **Diamantenbörse**, Russia, **Donaukraftwerke**, Austria, **Dow Chemical**, Netherlands, **DTAC**, Thailand

E

Eircom, Ireland, **EMC**,

Japan, **Enitel**, Norway, **ENTEL**, Chile, **E-Plus Mobilfunk**, Germany, **Ernst & Young**, Beltsville, MD, **ESPN**, Newington, CT, **ESSO Chemie GmbH**, Germany, **Etisalat**, UAE, **Eurocard**, Netherlands, **Eurotel**, Czech Republic, **Exxon Mobil**, Timonium, MD

F

First Data Resource, Great Britain, **Flight Simulator**, Qatar, **Ford Automotive**, Dearborn, MI, **Ford Motor Company**, Detroit, MI, **Französische Armee**, France

G

GE Americom, Woodbridge, NJ, **Generale Bank**, Netherlands, **General Motors de**

Portugal, Portugal, **General Motors**, Troy, MI, **Glaxo**, Great Britain, **Global Telesystem Ltd.**, India, **Global Crossing Asia**, Singapore, **Golden Telecom**, Russia, **Guangzhou Finance Centre**, China, **Guardian Royal Exchanges**, Great Britain

H

Hamburger Sparkasse, Germany, **HSH Nordbank**, Germany, **Hanson**, Great Britain, **Hewlett Packard Company**, Santa Clara, CA, **Honda**, Netherlands, **Honeywell Corporation**, Boston, MA, **Honeywell Europa B.V.**, Netherlands, **Hôpital St. Georges**, France

I

IBM, New York, NY, **IBM**, Boston, MA, **IBM**, Denmark, **IBM Deutschland GmbH**,

Germany, **IKEA**, Sweden, **ING Bank**, Netherlands, **Inovant Visa**, Phoenix, AZ

J

J.P. Morgan, New York, NY, **Jaguar**, Great Britain, **Jahre Line**, Norway, **Jazztel**, Spain, **Johns Hopkins University**, Baltimore, MD

K

Kansa-Yhtiöl, Iceland, **K.D.D.**, Japan, **Königsschloss**, Poland, **KPN**, Belgium

L

Lenbell, Russia, **Libertel**, Netherlands, **Lockheed Commercial Electronics**, Hudson, NH, **Libertis Telecom**, Congo, **Lietuvos Telecomas**, Lithuania, **Lucent Technologies**, Easton, PA, **LVA**, Germany

M

MacDonnell-Douglas,



N O P Q R S T U V W X Y Z

St. Louis, MO, **Madritel**, Spain, **Malaysia Telecom**, Malaysia, **Mannesmann Mobilfunk**, Germany, **Mauritius Telecom**, Mauritius, **Mauritius Telecom - GSM**, Mauritius, **MCI**, Japan, **Merrill Lynch**, Pompano Beach, FL, **Daimler Mexico**, Mexico, **Messeturm**, Germany, **Metropolitan Police**, Great Britain, **Microsoft**, Crofton, **Microsoft**, India, **Ministry of Interior**, Qatar, **Mobilcom**, Jordan, **Mobilcom**, Austria, **MobilCom CityLine GmbH**, Germany, **Mobiltel**, Bulgaria, **Mobinil**, Egypt, **Morgan Stanley**, Japan, **Morgan Stanley**, New York, NY, **MTN**, South Africa

N
National Bank of Bahrain, Bahrain,
National Geographic,

Washington, DC, **NBC Studios**, New York, NY, **NCC**, Great Britain, **Nestlé CNRN**, Switzerland, **Nextel**, Timonium, MD, **Nissan**, Netherlands, **Nokia**, Finland, **Nokia**, Czech Republic, **Nokia KFT**, Hungary, **Nortel Networks**, Mexico

O
O.T.E. Telecom, Greece, **Olympic Games**, Spain, **Olympic Committee**, Switzerland, **Omnitel UAB**, Lithuania, **One Tel B.V.**, Netherlands, **Orange Sverige**, Denmark, **Orange Sverige**, Norway, **Orange Sverige**, Sweden, **Orascom Tunisia**, Tunisia, **Orascom Algeria**, Algeria, **Otto Versand**, Germany

P
Pannon GSM, Hungary, **Phillips-MBLE**, Belgium, **Portugal Telecom**, Portugal, **Post & Telecom**,

Hong Kong, **PTT**, China, **Public Utilities Board**, Singapore

Q
Qatar Gas, Qatar
Quante, Schweden
Qualcom, Mauritius
Quattrogemini Oy, Finland

R
Rabo Bank, Netherlands, **Rabo Bank Ireland**, Ireland, **Radiolinja Oyj**, Finland, **Regus**, New York, NY, **Renault**, France, **Renault Technocentre**, France, **Reuters**, Italy, **Reuters**, Kuwait, **Reuters Ltd.**, Great Britain, **Rogaland Data**, Norway, **Royal Bank of Scotland**, Great Britain

S
Sabafone Switch Sana'a, Yemen, **Salomon Brothers**, New York City, NY, **Samson**, Belgium,

Scheepvaart College, Netherlands, **Schöller**, Germany, **Scitor**, Dallas, TX, **SEAT-Volkswagen**, Spain, **Shell**, Netherlands, **Siebel Systems**, Chantilly, VA, **Siemens AG**, Germany, **SNS Bank Den Bosch TF 1**, France, **Sprint**, Reston, VA, **Stanford University**, Palo Alto, CA, **Swisscom**, Switzerland

T
Telecom, Great Britain, **Telecom Argentina**, Argentina, **Telecom Brasil**, Brazil, **Telecom Egypt**, Egypt, **Telecom Eireann**, Ireland, **Telecom Italia**, Italy, **Telecoms City South Exchange**, Singapore, **Teledirektoratet**, Norway, **Telefonos de Lisboa e Porto**, Portugal, **Telefonia Lokalna**, Poland, **Telefonica**, Brazil, **Telefonica**, Spain, **Telefonos de Mexico**, Mexico,

Telegate Madrid, Spain, **Telekom inKiew**, Ukraine, **Telekom-Siol Center**, Slovenia, **Telemig**, Minas Gerais, Brazil, **Telenor AS**, Norway, **Telephone Organisation of Thailand**, Thailand, **Teleross**, Russia, **Telmex**, Mexico, **Telest**, Brazil, **Texas Instruments**, Netherlands, **Tiwag**, Italy, **TOT Telecom**, Thailand, **Toyota**, Germany, **Toyota Industries**, Japan, **Trayer-Group-IT Center**, UAE, **TRW Corporation**, Los Angeles, CA

U
UNEFONE, Mexico, **Unisource**, Italy, **Unisource**, Great Britain, **University**, Switzerland, **UWA Motorola**, Australia

V
VAP Medienzentrum, Germany, **Vertical Net**, Horsham, PA, **Vodafone**,

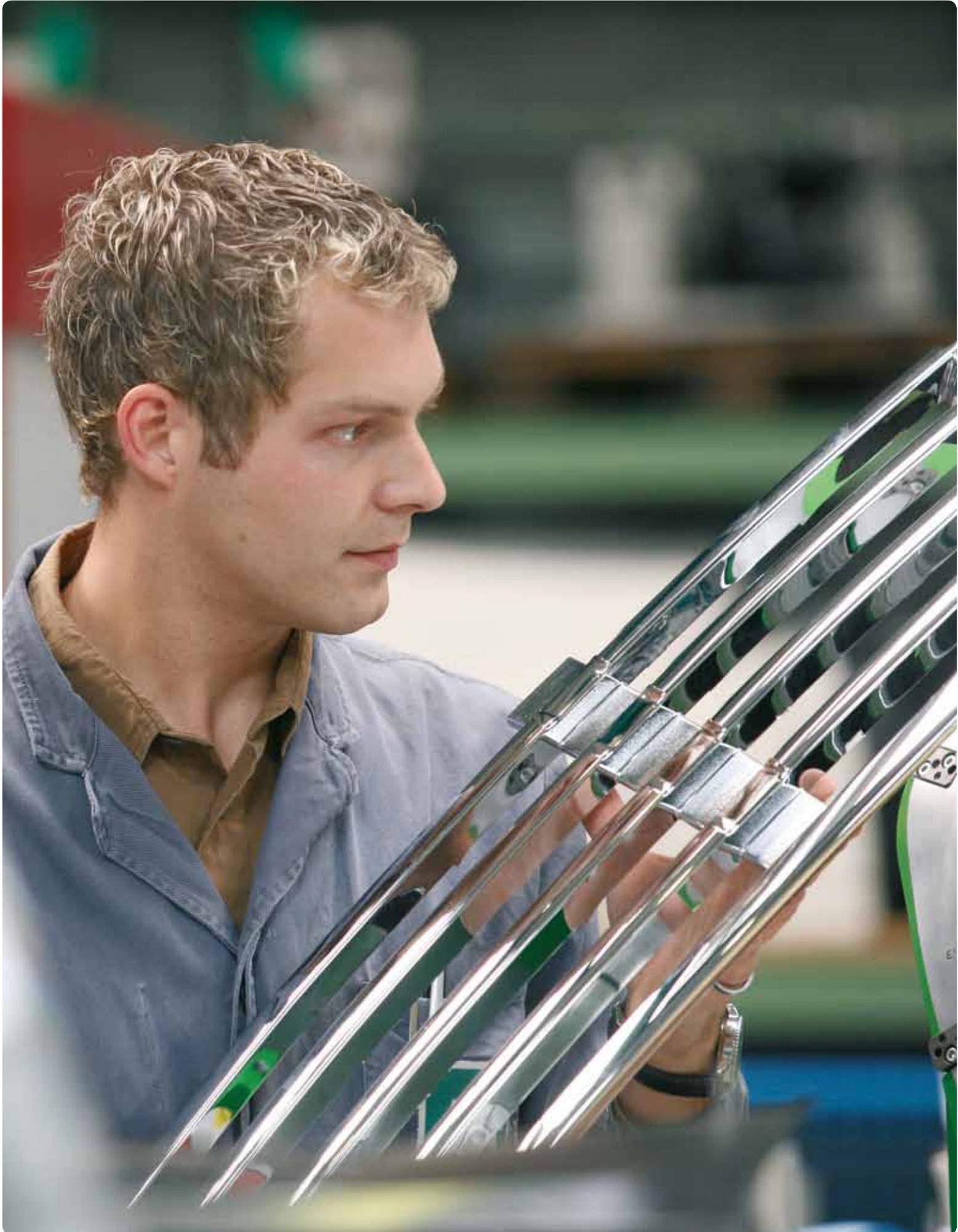
Germany, **Voicestream Wireless**, Rockville, MD, **Volkswagen AG**, Germany, **Volkswagen de Mexico**, Mexico, **Volvo Car**, Netherlands

W
World Trade Centre, Belgium, **World Trade Centre**, Switzerland

X
Xiamen PTT, China, **Xian PTT**, China, **Xian Petroleum**, China, **Xilinx**, Ireland, **Xansa**, India

Y
Yahoo, India, **YIT**, Norway, **Yäyrynen**, Finland, **Yoshigawa**, Singapore, **Yves Rocher**, France

Z
ZDF, Germany, **ZKB**, Switzerland, **Zhongshan Telecom**, China, **Zheijiang Telecom**, China, **Zensar**, India



Automotive

Engine compartment, interior, exterior

Cars are improving all the time. They are becoming better, safer and more versatile. In the STULZ Group, Montaplast specialises in high-quality, innovative plastic systems for the engine compartment, passenger interior and exterior of cars.

Montaplast makes cars fit for the increasingly stringent requirements governing safety, stability, durability, eco-friendliness, design and comfort. The fact that the car of tomorrow can do so much more than the car of yesterday without all the new components making it heavier or less stable has a lot to do with Montaplast: we are working on replacing metal assemblies with modern plastic ones that incorporate as many functions as possible. Using state-of-the-art processing and materials, Montaplast develops temperature and pressure-resistant modules for the cars of the future, which are low-cost, low-weight and boast a wide range of functions. Today, all this is Montaplast. At the heart of all systems "Made by Montaplast" are superior-quality plastic components.



Would you like to find out more about automotive systems from Montaplast? Then visit our website at www.montaplast.com and ask for our image brochure.



STULZ Group Hand in hand with our customers

Time is pressing. Climate protection and scarce resources demand new, intelligent technologies. This is why we develop innovative concepts and solutions hand in hand with our customers.

STULZ – contributing to the future with common sense and passion.



Intelligent technology
to solve the questions
of the future

People

Innovation feeds on ideas

One thing is certain: the number and performance of computer systems in the networks of global data traffic will continue to rise. With this in mind, STULZ design and development experts are working daily on air conditioning systems for information and communication technology, which are high in performance but low in consumption. In addition, the engineers at Montaplast are developing system components to make the car of the future lighter, more economical and more environmentally friendly.

The employees of the STULZ Group combine experience and creativity with a well-honed sense of what is possible. Continual further training at in-house seminars and interdisciplinary project work keep them right up to date in terms of both technology and the market. This explains why more than 5,000 people worldwide have decided to join the STULZ workforce.

Close to customers, close to technology, close to the environment – STULZ employees face the challenges of the future with open hearts and open minds.







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