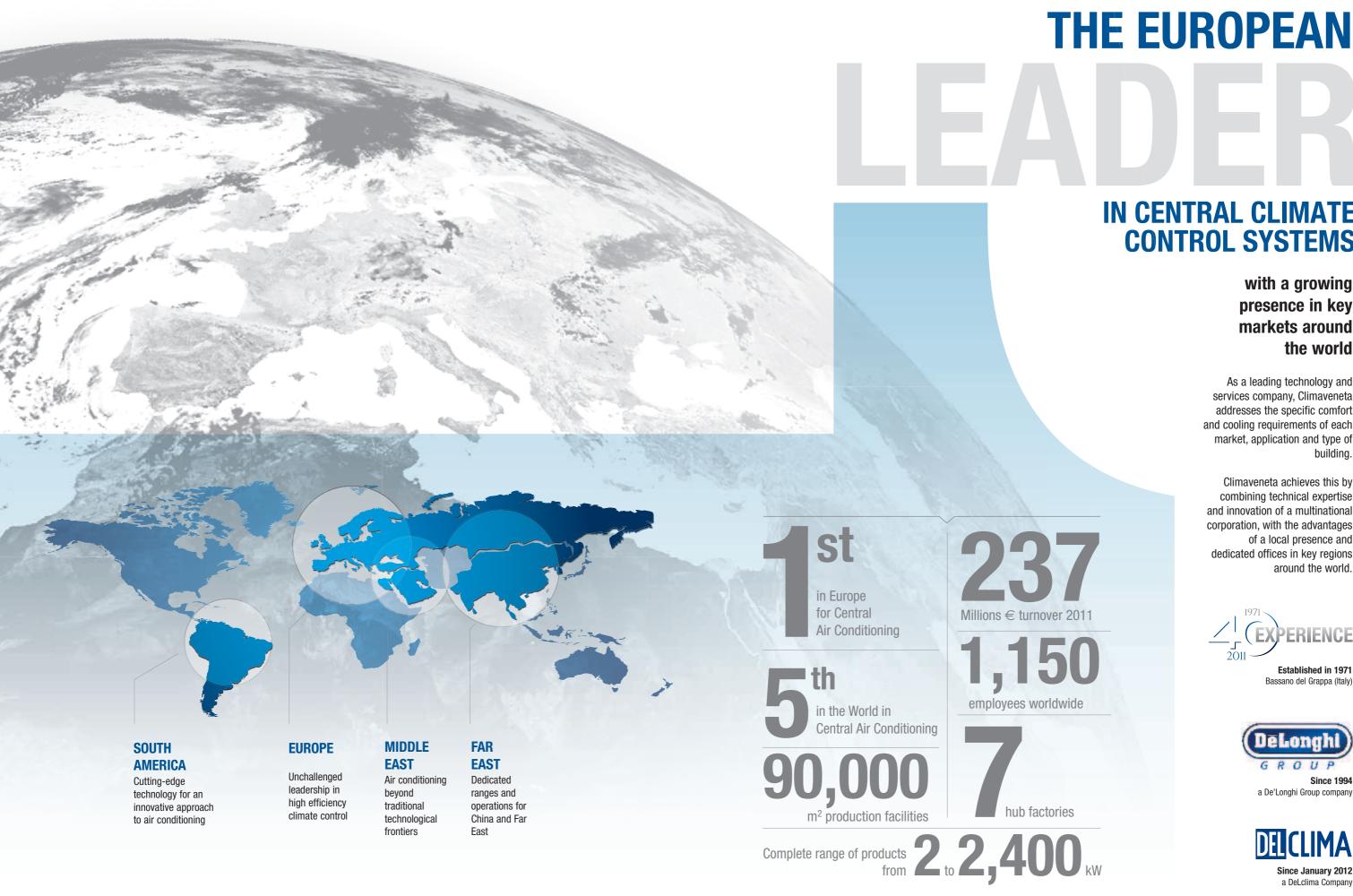


OUR BIGGEST CHALLENGE IN THIS NEW CENTURY IS TO TAKE AN IDEA THAT SEEMS ABSTRACT - SUSTAINABLE DEVELOPEMENT- AND TURN IT INTO A REALITY FOR ALL THE WORLD'S PEOPLE.

Kofi Annan



IN CENTRAL CLIMATE CONTROL SYSTEMS

with a growing presence in key markets around the world

As a leading technology and services company, Climaveneta addresses the specific comfort and cooling requirements of each market, application and type of building.

Climaveneta achieves this by combining technical expertise and innovation of a multinational corporation, with the advantages of a local presence and dedicated offices in key regions around the world.



Established in 1971 Bassano del Grappa (Italy)



Since 1994 a De'Longhi Group company



MISSION >VISION

With 40 years experience and a complete range of products and systems for each type of building, Climaveneta is the European leader in central climate control systems.

Climaveneta's vision is to combine perfect comfort with the highest possible energy efficiency and environmental standards to develop custom-made and innovative climate control systems that exceed our customers' expectations.

The company's mission is to ensure maximum comfort in every single project and type of building while, at the same time, paying attention to reducing the environmental impact of the system and, as a result, that of the entire building.

Climaveneta. Sustainable Comfort.





ENVIRONMENTAL RESPECT

Decreasing energy consumption, the systematic reduction of atmospheric emissions and the extensive use of renewable sources.



HIGHEST RETURN ON INVESTMENT

Thanks to innovative solutions that simplify the system and ensure high energy efficiency, low maintenance and longer life cycle of the product.



SPECIFIC SOLUTIONS FOR EACH PROJECT

Through a wide range of highly configurable products and systems, combined with customized solutions.



EXPERIENCE

40 years of leading experience in the development of efficient units for air conditioning and heating.

OUR VALUES ENVIRONMENTAL

Directly contributing to the EU "20-20-20" sustainability targets

Climaveneta has a long-term commitment to improving the sustainability of its products, contributing to an environmental friendly air conditioning market.

From manufactoring to the development of new products, every decision concerning the organization has been carefully considered, with the maximum care given to the intelligent use of resources, running costs and noise level reductions.



Climaveneta recognizes that intelligent use of energy is the most effective and direct way to contribute to the development of sustainable air-conditioning.

New technology is complemented by sustainable operation which has been demonstrated by successfully obtaining the ISO 14001 certification in December 2009.



ENERGY EFFICIENCY

Systematic emissions reduction through the search for the highest energy efficiency

Reducing energy consumption and sourcing sustainable energy solutions for comfort in buildings are highly topical subjects. With the rising costs of fuel on one side and the growing concern over the consequences of global warming and environmental pollution on the other, increases the sensitivity towards sustainable architecture and efficient plants in all sectors.



3/% of products are in class A or above



EXTENSIVE USE OF RENEWABLES

Increasing attention to issues such as air pollution and intelligent use of energy

The topic of energy efficiency in modern buildings has become an important issue, following the international trend that architecture is of great importance in terms of sustainability, reduction of CO2 emissions and increasing use of renewable energy sources. In line with this trend, Climaveneta produces units more efficient and silent, able to exploit natural energy sources, guaranteeing the achievement of credits for the energy certification of buildings.



35%

of products use renewable energy



REDUCED NOISE EMISSIONS

Extremely silent operations to reduce acoustic emissions in every project

Noise pollution is considered as a major hazard of modern life, especially in urban areas that are industrialized and urbanized. Low noise levels of the Climaveneta units make them suitable to reducing the noise in every building. Extremely silent operations that increase the level of comfort for users and operators in every project, and reduce the environmental impact on the building.

All Climaveneta units are available in four noise level configurations:



tandard

SL 📹

noise reduct



-6dB(A) noise reductio



-12dB(A)
noise reduction



INTEGRATED POLICY

Systematic search for the maximum sustainability

Climaveneta's commitment to energy efficiency and environmental compliance is expressed through the systematic search for maximum sustainability; from product development to operations management, as demonstrated by the recent ISO 14001 certification achievement.

Climaveneta plays an active role in achieving the climate and energy policies set by the European Union and to implement the '20-20-20' sustainable targets.



06/07 Company Profile

OUR VALUES



SPECIFIC SOLUTIONS FOR EACH PROJECT

Air conditioning solutions, optimised and tailored to every building

Modern architecture and occupiers' increased sensitivity to comfort in the workplace require a focus on the specific characteristics of each building, both in terms of usage as well as of its structural features.

Climaveneta, with 40 years' experience in air conditioning and heating, produces climate control solutions that address all types of buildings and applications.



WIDEST RANGE OF SOLUTIONS

A comprehensive range of products and systems

A complete range of products and systems designed to satisfy the specific requirements of each building and application. All over the world, no matter how demanding each project can be, Climaveneta has the proper, most efficient and sustainable solution.

PRODUCT FAMILIES



HIGH CONFIGURABILITY

Highly configurable solutions for every type of building

A wide range of configurations has been developed to give customers maximum design freedom: all the units are adaptable to a variety of plant configurations to cover a very wide range of requirements and goals.

COUNTLESS CONFIGURATIONS for all products:

ptions for al air systems

recovery options for

air treatment



TAILOR-MADE SOLUTIONS

Taking into account specific needs

When configurability is not enough, Climaveneta can provide a truly tailor-made solution to enhance the property's comfort and energy efficiency levels by adapting its products to the particular features of the individual building.



20%

of total turnover generated by custom-made solutions for special projects

OUR VALUES

HIGHEST





LOW ENERGY CONSUMPTION

Lower energy consumption, the key to achieve considerable cost savings and better energy performance

An air-conditioning system is characterized not only by increasing demand due to the greater sensitivity to comfort, but also to the high energy consumption used to cool. Hence the first measurement of a quality solution must be, together with reliability, energy efficiency. For Climaveneta it means sustainability, lower running costs, greater return on investment and also better comfort.

- Reduced operating costs
- ✓ Better energy performance and certification class of the building



LOW MAINTENANCE

When low maintenance means minimum risks and higher reliability

Climaveneta's Air Conditioning Systems require little maintenance on all models, due to the manufactoring approach that significantly simplifies the system; technical areas are reduced, hydronic circuits are simplified and control is rationalized.

The result is a unit with a long lifetime and minimal maintenance needs.

- ✓ Products conceived for continuous update
- **✓** Full range of maintenance packages

When sustainability is the 'must have' strategy for long-term economical success

Climaveneta vision sees economic and environmental sustainability as two sides of the same coin. A goal made possible by a technology leadership that is efficiency-oriented.

In the last few decades, ROI has become a central financial metric for many industrial decisions.

Maximum ROI is achieved by implementing the following guidelines in all activities.



PLUG & PLAY SOLUTIONS

Innovative solutions that simplify air conditioning systems

Climaveneta develops innovative solutions with Plug and Play feature that simplifies and streamlines all products and systems and provides quick and efficient connections and start up.

Simplified systems result in a significant reduction in the operations carried out on site, units are easier to install and this means substantial savings in terms of time and costs for the customer.

- Reduced on site operations
- **✓** Simplified system design



LONGER LIFETIME

Product life cycle extension.

Many factors can affect the life expectancy of an air conditioning system.

Climaveneta units are designed with a clear approach to increase the total life cycle of the product; improved overall quality is the result of a superior know.how, superior technology and advanced operations management.

✓ High flexibility for no needof anticipated updates/ refurbishments

mkt average lifetime

10% longer lifetime than market average



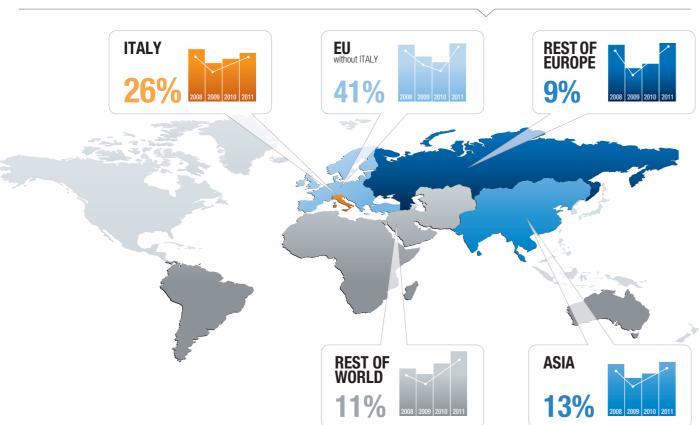
FACTS & FIGURES

The figures speak for themselves

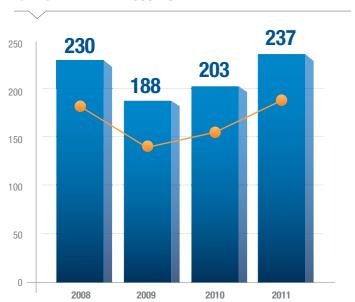
A worldwide presence and local support make Climaveneta a preferred supplier of air conditioning and heating products. As an internationally active company, Climaveneta's network is approaching new areas all around the world. A significant business presence in the European markets that is accompanied by an increased expansion in developing countries.

TURNOVER BREAKDOWN BY WORLD REGION

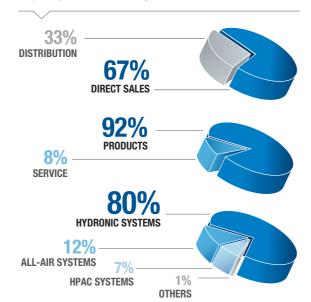
2011 RESULTS & TREND 2008-2011



TURNOVER TREND 2008-2011



TURNOVER BREAKDOWN





TREND 2008-2011

TREND 2008-2011

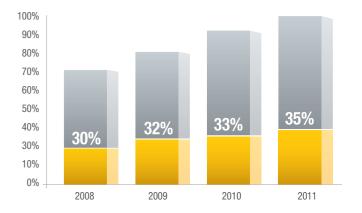
RENEWABLES

Sustainability means reducing CO₂ emissions and increasing use of natural and renewable sources.

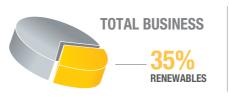
In line with this trend, Climaveneta continuously increases the use of renewables, now representing 35% of the total product portfolio.

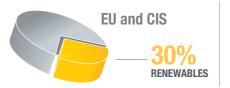
RELEVANT RANGES:

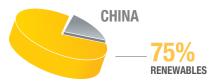
- PRANA units
- Reversible units - INTEGRA units
- Free Cooling units



SHARE OF BUSINESS Based on turnover 2011







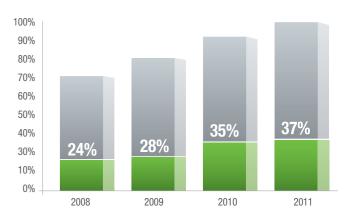
ENERGY EFFICIENCY

Energy-efficient products are conceived as sustainable solutions to fight against global warming and the rising cost of the fuel.

Climaveneta commitment is clearly expressed through its specific ranges specially developed to reduce energy consumption. Best-in-class products that represent a significant part of the total product portfolio.

RELEVANT **RANGES:**

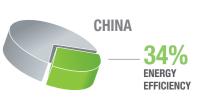
- 'CA' and 'CA-E' units
- TECS units
- Free Cooling units
- INTEGRA units



SHARE OF BUSINESS Based on turnover 2011







CLIMAVENETA



Direct local presence in the main HVAC markets is a core element of Climaveneta's business

strategy an among the main drivers of its international development. Climaveneta Group counts a fast growing number of subsidiaries and production facilities in Europe and worldwide.

DIRECT LOCAL PRESENCE IN MAJOR MARKETS





ORGANIZATION BASED ON LEAN MANUFACTORING PRINCIPLES

A production that is completely structured according to lean thinking principles:

- Increased efficiency
- ▶ Higher quality standard
- ▶ Best process integration

SPECIALIZED PRODUCT DEVELOPMENT

Climaveneta vision aims at the maximum customer satisfaction through the widest range of solutions, all of them featuring cutting-edge technological innovations.

- ▶ Sharpest focus on R&D, structured into dedicated teams for each main system technology
- Central coordination aimed at efficient project management and optimum knowledge sharing

DEDICATED PRODUCTION LINES

The entire manufacturing process is conducted undercover through dedicated production lines

- ▶ Higher cost-savings
- ▶ Sharper focus on continuous improvement





CLIMAVENETA 1

Bassano-Italy

- Productive area: 12.500m²
- Liquid Chillers
- Reversible Chillers
 Integra units up to 500kW



CLIMAVENETA 2 Belluno-Italy

- Productive area: 25.500m²
- Liquid Chillers Reversible Chillers
- Integra units - Rooftop units from 500kw to 2400kw



CLIMAVENETA 3

Belluno-Italy

Productive area: 7.000m² Air Handling units



CLIMAVENETA 4 Treviso-Italy

Productive area: 10.000m²

- Residential Chillers
- Dedicated Heat Pumps
- Hydronic Terminals - HPAC units



CV PARETS DE VALLES Barcelona-Spain

Productive area: 2.500m²

- Light Commercia
- Rooftop units



CV CHAT UNION Shanghai - China

Productive area: 15.000m²

- Liquid Chillers, for the far eastern market

Reversible Chillers



CV REFRIGERATION

Shanghai - China

Productive area: 2.500m²

- HPAC units for the far eastern market



HUMAN RESOURCES

Climaveneta draws on the skills and expertise of all its talents from around the world.

More than 1100 employees work in 180 countries to achieve the Climaveneta values of sustainability and innovation. A fast growing society of people with shared aims and goals. A fast growing society of people with shared values and goals .

HUMAN FIGURES

Average age

Average _ seniority years School background

high school + university

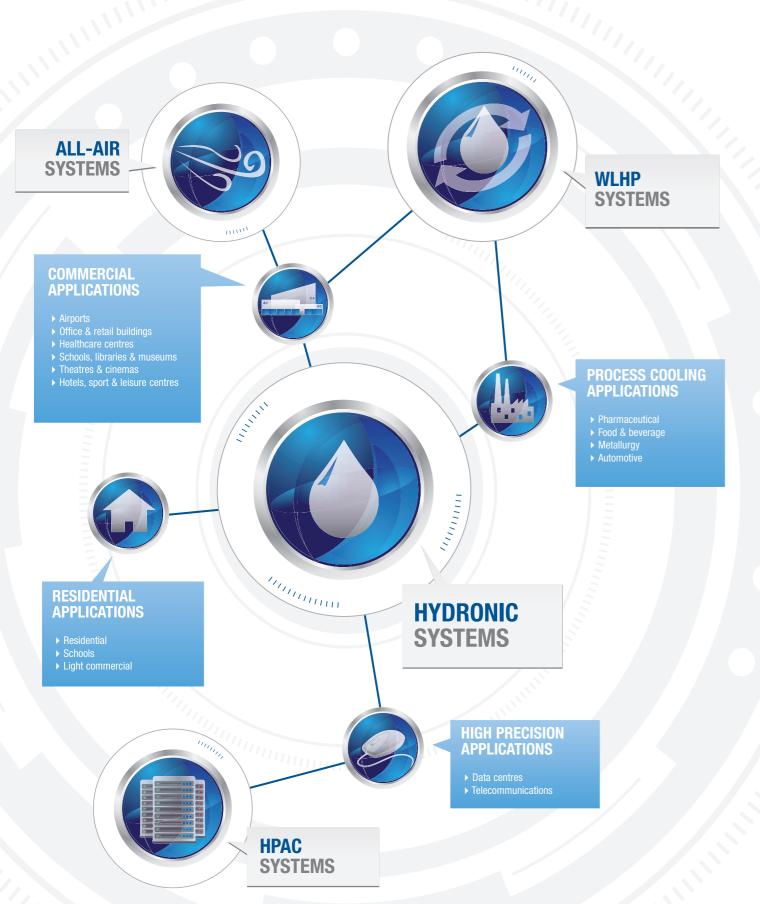
BREAKDOWN BY FUNCTION



BREAKDOWN BY WORLD AREA



APPLICATIONS, SYSTEMS AND PRODUCTS



HYDRONIC SYSTEMS









HIGH Precision

COMMERCIAL



- Liquid chillers - Reversible chillers
- Dedicated heat pumps - Units for 4pipe systems



When the combination between perfect comfort and high efficiency hydronic systems is the best choice

units complete the system. The whole is managed by Climaveneta group and monitoring devices.

Spanning from systems based on cooling only chillers, with or without free-cooling, reversible chillers and heat pumps, as well as on units for four pipe systems, they all share the feature of using water as exchange fluid. Hydronic terminals and air handling





- Air handling units



Control, supervision & monitoring devices

ALL-AIR SYSTEMS













The perfect choice for temperature and humidity treatment, filtering the air in large spaces

The air-to-air packaged solution combines in one single solution cooling, heating and air treatment function, without the need of intermediate fluids. Refrigerant gas exchanges and transfers heat directly to the air served by the unit, resulting in "plug & play" approach combined with high efficiency required by modern buildings.





Control, supervision & - Rooftop units with heat recovery monitoring devices

The ideal solution for a versatile, flexible and efficient system

Water loop heat pump systems consist of multiple heat pump units connected to a closed hydraulic water loop. From this circuit the units take the required heat and reject the heat removed from the ambient. This solution results in versatile and highly

WLHP SYSTEMS











Indoor heat pumps for water loop systems

flexible systems.



Outdoor heat pumps for water loop systems



- Control, supervision & monitoring devices



HPAC SYSTEMS

The uncompromised solution for efficient and reliable data centers and high precision applications

Based on a dedicated range of water cooled or direct expansion units, these systems integrate state-of-the-art technologies, as inverter driven compressors and the adaptive set point to combine highest efficiency and complete reliability.







HIGH PRECISION



- Close control units
- Inverter driven & on/off - Direct expansion and
- Water cooled



- Cooling doors

- Rack coolers

- Aisle Containment systems

- Remote condensers









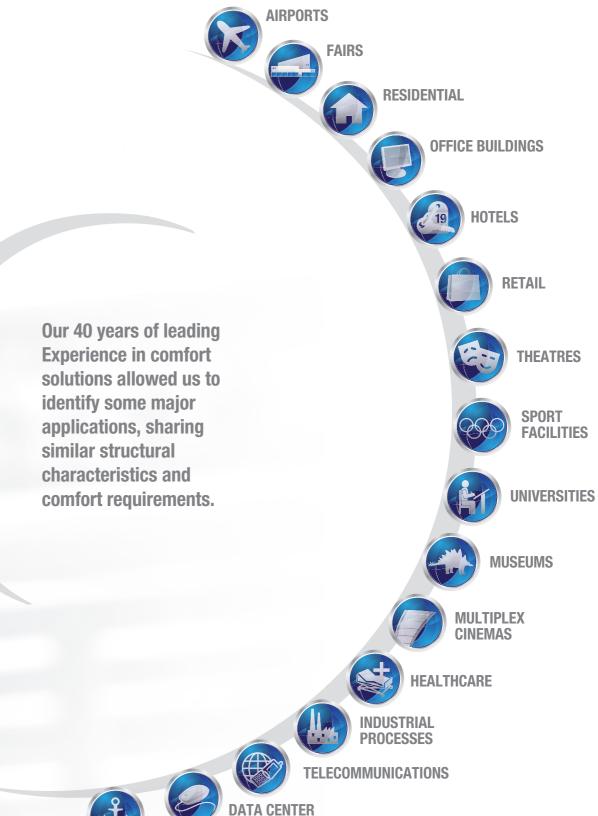


- Liquid chillers with free cooling or magnetic levitation





BY FAR THE BEST PROOF IS EXPERIENCE





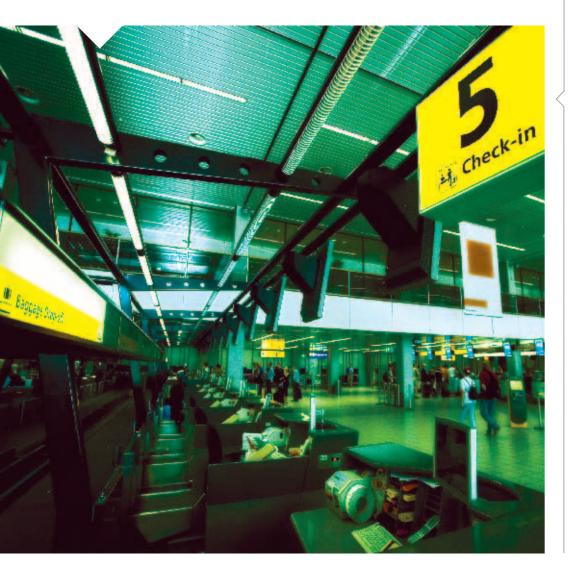






2009 Portugal (Lisbon)

THE LISBON AIRPORT





Hydronic

Total cooling capacity: 11970kW

Total heating capacity: 840kW

Installed machines:

3 FOCS-CA/B 4822 2 RECS/LT 1962 6 FOCS-CA/LN 5403

PROJECT

The Lisbon Airport is the busiest and most important airport in Portugal.

CHALLENGE

In order to meet the needs that increasing numbers of passengers and air traffic has brought about, the airport has invested in the modernisation and improvement of services on offer.

SOLUTION

The air conditioning system is among the strong points of the new infrastructure. It is based on several Climaveneta large chillers and heat pumps with screw compressors in low noise emissions versions providing with highest energy efficiency both for the very high cooling loads as well as and for heating needs of the building.

Architect: Giampaolo Imbrighi e Associati



All-air System

Air handling unit Total air flow: 350.000 m³/h

Installed machines:

29 air handling units WIZARD Automatic

PROJECT

The Italian Pavilion at the Expo Shanghai 2010 is the showcase of Italian excellence in all sectors contributing to a higher quality of life in urban areas.

CHALLENGE

Designed by Giampaolo Imbrighi, the Italian Pavilion blends the Italian cultural values with the innovation of a scientific research more and more focussed on sustainability

SOLUTION

Climaveneta is involved with a pivotal role as supplier for the air conditioning system with a solution based on 29 WIZARD air handling units. With a total air flow of 350.000 m³/h and thanks to their completely modular concept, the units are provided with all necessary devices to guarantee optimum filtration, humidification and energy recovery, consistently with the sustainable approach that features the whole pavilion.

2010 China (Shanghai) **ITALIAN PAVILION EXPO SHANGHAI 2010**





2006 Ukraine (Kiev) **BORISPOL AIRPORT**

- ▶ Hydronic System ► Total cooling capacity: 900kW
- ▶ Installed appliances: 2 FOCS 1902, 1 NECS 604/B, 12 CHD. 3 a-LIFE 330



2009 Chile (Puerto Montt) **EL TEPUAL AIRPORT**

- Hydronic System
- ► Total cooling capacity: 1256kW
- ▶ Total heating capacity: 606.4kW
- Installed appliances: 1 ERACS Q W 2502, 1 FOCS WH 2402



Greece (Athens)

ELEFTHERIOS VENIZELOS AIRPORT

- Hydronic system
- ▶ Installed appliances: 5 NECS-N



2009 Portugal (Faro) **FARO AIRPORT**

- ► Total cooling capacity: 1300kW
- ▶ Hydronic System
- ► Total cooling capacity: 3500kW Installed appliances:
- 2 FOCS/B 8404



2004 Italy (Milan) MILAN

FAIR

- ▶ Hydronic System
- ► Total cooling capacity: 621kW
- ▶ Total heating capacity: 521kW
- Installed appliances: more than 800 hydronic fan coils



2005 Italy (Rome) **ROME** FAIR

- ▶ Hydronic System
- ► Total cooling capacity: 26000kW ▶ Total heating capacity: 16000kW
- ▶ Installed appliances: 168 rooftop units, 34 air cooled chillers



2011 South Africa (Cape Town)

CTICC **Cape Town International Convention Centre**

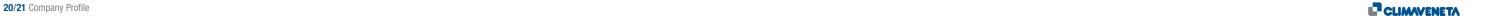
- ▶ Hydronic System
- ► Total cooling capacity: 1438kW
- Installed appliances:
- 1 FOCS-W/B 3202.
- 1 FOCS-W/B 2702



2004 Spain (Castellon)

AUDITORIUM AND CONVENTION CENTRE

- ▶ Hydronic System
- ► Total cooling capacity: 1400kW
- ► Total heating capacity: 1400kW
- ▶ Installed appliances: 1 air cooled chiller, 3 INTEGRA multiuse units





2011 Italy (Milan)

BOSCO VERTICALE



Investor: Hines Architect: Boeri Studio Designer: Hilson Moran



Hydronic System

Installed machines: 4x ERACS2-WQ

PROJECT

This is a new architectural model designed by Boeri Studio, an example of vertical densification of nature within the city as part of the project Porta Nuova Isola, thanks to two residential towers. The terraces of the towers will house holders for a total area of 2.780 m² designed to contain 900 trees apart from a wide range of shrubs and floral plants.

CHALLENGE

The main goal of Bosco Verticale is to form a microclimate around the apartments, reducing noise and help the district to breathe better by absorbing CO2 and releasing oxygen.

SOLUTION

Climaveneta interprets this approach with an air conditioning system based on 4 multi-purpose INTEGRA ERACS-WQ units with the exchange of heat from a geothermal source optimised for the use of ground water. These units, thanks to their evolved construction philosophy and to their controller logic, produce warmth and cooling independently, overcoming the combination of a number of separate heating and refrigerating resources.

Investor: Hines

Architect: Studio Kohn Pedersen Fox

Designer: Hilson Moran



Hydronic System

Total cooling capacity: 8210kW

Total heating capacity: 3184kW

Installed machines:

4x FOCS-W/R H, 2x FOCS-W/CA/H/R, 10 ERACS-WQ

PROJECT

Porta Nuova Varesine represents a crucial element of Milan's urban transformation: the LEED gold precertification for this project managed by Kohn Pedersen Fox studio, is indicative of its sustainable credentials.

CHALLENGE

One of the project's main aim was to achieve a reduction in its energy performance in comparison to a codestandard building by using the most advanced techniques of sustainable design. Each building will be equipped with advanced systems for the supply of energy from renewable sources that reduce emissions of CO2.

SOLUTION

6 FOCS-W units with reverse cycle on the hydronic side and total heat recovery have been chosen for the air conditioning system as well as 10 multi-purpose INTEGRA ERACS-WQ units, able to produce both hot water and chilled water simultaneously and that use upper aquifer water, renewable special source in Milan surroundings.

2011 Italy (Milan) **PORTA NUOVA VARESINE**

OFFICE BUILDINGS





2010 Bulgaria (Pleven) HOUSE **KAYLAKA**

- ▶ Hydronic System
- ▶ Total cooling capacity: 40kW
- ▶ Total heating capacity: 34kW
- Installed appliances: 2 AWR-MTD-XE/H 0061t, 12 a-LIFE



2000 United Kingdom (London) **MONTEVETRO RESIDENTIAL**

- ▶ Hydronic system
- ▶ Total cooling capacity: 1000kW
- ▶ Installed appliances: 4 low noise water cooled chiller for indoor installation



2008 Slovakia (Bratislava)

GAUDÌ - BAZOVA

- ▶ Hydronic System
- ► Total cooling capacity: 508kW
- Installed appliances: 2 FOCS-ME 1302



2009 UK (Worcester) **GEORGIAN PROPERTY**

- ▶ Hydronic System
- ► Total heating capacity: 14kW
- ▶ Installed appliances: 1 PRANA AWr/MTD unit with domestic hot water production



2010 South Africa (Cape Town) **AURECON OFFICE BUILDING**

Architect: MaC Architects

- ▶ Hydronic System
- Installed appliances: 2x TECS2-W



2007 United Kingdom (London) **THE WILLIS**

▶ Hydronic system

BUILDING

- ▶ Total cooling capacity: 6000kW
- ▶ Installed appliances: 7 TECS



2011 Italy (Milan) **SEGREEN**

BUSINESS PARK

- ▶ Hydronic System
- ► Total cooling capacity: 1250kW
- Installed appliances: 2x ERACS-QI/LT-SL



2004 Germany (Munich) **HIGH LIGHT TOWERS**

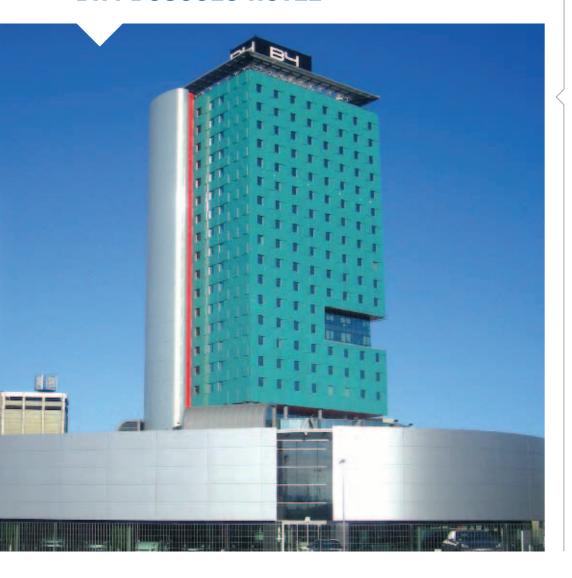
- ▶ Hydronic System
- ► Total cooling capacity: 4000kW
- Installed appliances: 5 super low noise air cooled chillers



RETAIL (

2010 Italy (Milan)

BH4 BOSCOLO HOTEL



Investor:Alinvest SPA Gruppo LiuniArchitect:Studio Marzorati ArchitetturaDesigner:Studio Tekser - G. Davoglio

Hydronic System

Total cooling capacity: 2332kW

Total heating capacity: 2392kW

Installed machines:

2x ERACS2-WQ, 2x ERACS-WQ, 1x ERHHS

PROJECT

The tower, has been designed by arch. Marzorati, who earned the prestigious Real Estate Award "Golden Brick" for the best hotel and tourism project of the year in June 2009.

CHALLENGE

Structural complexity of the hôtellerie activities entails very different needs according to different occupancy loads and time bands. It was therefore necessary to develop a flexible system able to adapt to each single requirement.

SOLUTION

The units installed are Climaveneta INTEGRA multi-purpose ERACS-WQ units suitable for the production of cold and hot water by two independent water circuits. The system is designed to operate at partial loads, according to the different occupancy loads and different time bands.



Hydronic System All-air System

Total Cooling capacity: 980kW

Installed machines: 4x WHISPER ENTHALPY, 1x NECS-FC. 1x WIZARD

PROJECT

Located in Zagreb, Super Konzum Shopping centre is a 6000 m² mall, providing, as all Konzum stores, high quality shopping experience to its customers and visitors.

CHALLENGE

The project of the air conditioning system was characterized by several challenges, due to a very strict regulation about noise emissions, due to the location of the building. All these challenges had to ensure ideal comfort levels and a high energy efficiency.

SOLUTION

After thorough examination of a number of alternatives, the ideal solution was reached choosing a system based on 4 i-Whisper Enthalpy combined with a NECS chiller in free cooling version.

The combination of a Rooftop units with a NECS-FC units using Free-cooling allowed an average power saving of 30% compared to standard European consumption and significant advantages in terms of reduced maintenance and increased reliability.

KONZUM D.D. - OPOROVECKA





2009 Chile (Easter Island) HANGAROA ECO VILLAGE & SPA

- ▶ Hydronic System
- ► Total cooling capacity: 166kW
- ► Total heating capacity: 185kW
- Installed appliances:1 NECS-Q/B 0704



2010 India (Goa) GRAND HYATT HOTEL GOA

- ▶ Hydronic System
- ► Total cooling capacity: 4550kW
- Installed appliances:
- 2 NECS/B, 2 NECS/B, 2 NECS/B, 2 NECS/B, 3FOCS-W



2008 Portugal (Madeira) THE VINE HOTEL

- ▶ Hydronic system
- ► Total cooling capacity: 440kW
- ► Installed appliances: 2 FOCS-W 1002



2008 Italy (Milan) NH HOTELS FIERA MILANO

- Hydronic system
- ▶ Total cooling capacity: 1900kW
- ▶ Total heating capacity: 2100kW
- Installed appliances:
 4 multiuse INTEGRA
 ERACS-Q/SL 2022 units



2002/2009 UK (Outlets all over the country) MARKS & SPENCER

- ► Hydronic System
- Total cooling capacity:
 Chillers with capacity from 30kW to 2500kW



2010 South Africa (Cape Town)
HOWARD CENTRE CAPE TOWN

- ▶ Air to Air System
- ► Total cooling capacity: 157kW
- ➤ Total heating capacity: 220kW
- Installed machines: 1x WORK-T AX



2008 Italy (Rimini) **IKEA**

RIMINI

- Hydronic systemTotal cooling capacity:
- 2800kW

 Total heating capacity:
- 3000kW
 ► Installed appliances:
 2 reversible water cooled
 TECS-HF units



2004/2009 Germany (Outlets all over the country)

MFI - ARCADEN

- ▶ Hydronic System
- Total cooling capacity:
 Chillers with capacity from
 400kW to 4500kW)



SPORT FACILITIES

2005 Italy (Venice)

LA FÉNICE THEATRE



Architect: Gian Antonio Selva



Hydronic System

Total cooling capacity: 2192kW

Installed machines: FOCS

PROJECT

The "Gran Teatro La Fenice" is one of the most precious jewels of Venice and one of the best known monuments of art and music in the world. A marvellous building from every aspect, even concerning the air-conditioning system.

CHALLENGE

A project that has no comparison in its technical complexity, logistical constraints, acoustic and aesthetic requirements and where the chiller units that provide this comfort had to be absolutely silent, in terms of sound levels as well as in vibrations.

SOLUTION

Climaveneta developed special compact and modular units, that could be installed in restricted spaces and to enable their transportation through the canals. They were designed to achieve very high energy efficiency, enhanced by an integrated heat recovery system, and incredibly low sound emissions with no vibrations.

Architect: JSK Architects



Hydronic System

Total cooling capacity: 9360kW

Installed machines: 13x FOCS2-W/CA

PROJECT

The Arena hosted the opening match of the European Football Championship UEFA 2012 and also group matches, quarterfinal and semifinals. The gross capacity of the stadium could welcome 55000 spectators.

CHALLENGE

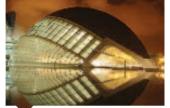
The competitive tender for system's selection was characterized by high requirements concerning chillers energy efficiency in terms of ESEER and extraordinary acoustic requirements considering special acoustic enclosures for chillers.

SOLUTION

After long and detailed tender including major world-wide producers of dedicated equipment, investors decided to select 13 Climaveneta FOCS2-W/CA 3202 double circuit units (class A energy efficient of Eurovent classification), ensuring continuous unit operation, reduced electrical consumption and extraordinary silent operations.

NATIONAL STADIUM





2005 Spain (Valencia) **HEMISFERIC**

- ▶ Hydronic System
- Hydronic System
 Total cooling capacity: 450kW
- ➤ Total heating capacity: 500kW
- ► Installed machines: 1x chiller and 1x heat pump, air cooled, with total heat recovery



2009 Spain (Bilbao)
TEATRO
CAMPOS ELISEOS

- ▶ Hydronic System
- ➤ Total cooling capacity: 536kW
- Installed machines:
- 1x FOCS-FC/SL



2006 Spain (Valencia)
ART PALACE

- REINA SOFIA
- Hydronic SystemTotal cooling capacity: 500kW
- Installed appliances: 1 high efficiency air cooled chiller



2006 Italy (Turin) TEATRO REGIO

- ▶ Hydronic System
- ► Total cooling capacity: 3000kW
- ▶ Installed machines: 4x FOCS



2006 Spain (Valencia)
VELES ET VENTS

- ▶ Hydronic System
- ► Total cooling capacity: 1700kW
- Installed appliances:
 2 FOCS-WH 3203 optimized for sea water applications



2007 Italy (Turin) PALAVELA

- ► Hydronic System
- ▶ Total cooling capacity: 3240kW
- Installed appliances:
- 4 powerful air cooled liquid chillers



2008 Great Britain (London)

TWICKENHAM STADIUM

- Hydronic System
- Total cooling capacity: 3500kWInstalled machines: 7x TECS
- Installed machines: 7x TEC high efficiency chillers



2005 Ukraine (Kiev) SLAVA PLOSHAD ICE RINK

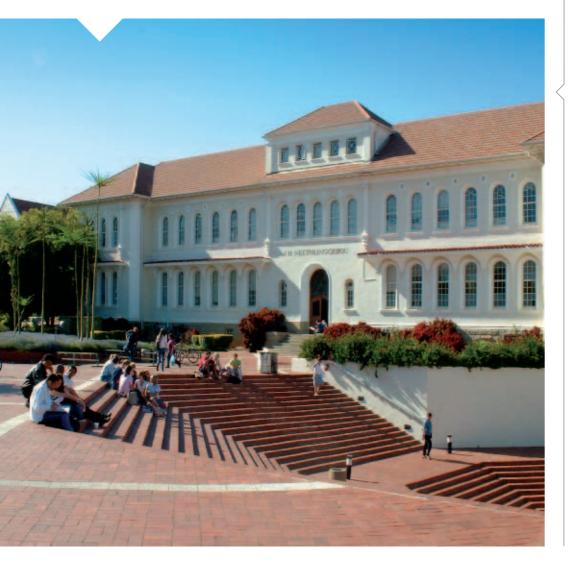
- ▶ Hydronic System
- ► Total cooling capacity: 750kW
- Installed appliances:1 FOCS-CA





2007 Sud Africa (Stellenbosch)

UNIVERSITY OF STELLENBOSCH





Hydronic System

Total cooling capacity: 4000kW

Installed machines: 1 TECS, 1 FOCS

PROJECT

The University of Stellenbosch is one of the oldest and most prestigeous Universites in South Africa with an history dating back to 1866.

CHALLENGE

Infrastructure play a crucial role in the quality of teaching, as well as in social life, hence Stellenbosch University is equipped with leading edge technical systems. Climaveneta is partner for air conditioning, providing a total of 4000kW with its units in several buildings of the campus.

SOLUTION

Climaveneta's hydronic systems are based on high efficiency air cooled FOCS and TECS chillers. The first is equipped with screw compressors, the second uses cutting edge magnetic levitation compressors, delivering very high performances both at full as well as at part load, with

minimum noise levels.



Hydronic System

Total cooling capacity: 479kW

Total heating capacity: 514kW

Installed machines: 1x ERACS2-WQ

PROJECT

The MART museum in Rovereto is one the most popular and visited contemporary art museums in Italy. The building comprises four floors which are connected by a main staircase and are positioned around the main central square.

CHALLENGE

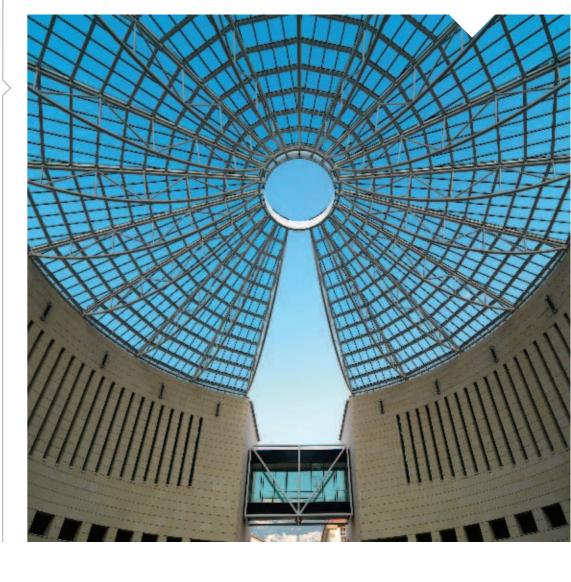
Even if it is a recent building with a central district heating, the use of different kinds of materials, from glass to concrete materials did not guarantee a good energy efficiency.

SOLUTION

The most suitable system for the museum is the water multifunctional unit ERACS2-WQ. This unit can reach 55°C delivery temperature, and achieves greater efficiency without using the district heating. The chosen unit allows the functioning at partial loads; this is particularly useful in a museum that has not only a permanent exhibition, but also temporary exhibitions and a variable flux of visitors throughout the year.



MUSEUMS





2006 China (Beijin) **SIEEB UNIVERSITY**

- ▶ Hydronic System
- ► Total cooling capacity: 1200kW
- Installed appliances: 2 FOCS-W. 1 TECS



2010 Australia (Canberra) ANU **CANBERRA**

- ▶ Hydronic System
- ► Total cooling capacity: 120kW
- Installed appliances:
- 1 NECS-N 0512



2006 Italy (Milan) **BOCCONI** UNIVERSITY

- ▶ Hydronic System
- ► Total cooling capacity: 200kW
- ▶ Total heating capacity: 240kW
- ▶ Installed appliances: 1 NECS-Q



2010 South Africa (Cape Town) **UCT - UNIVERSITY OF CAPE TOWN**

- ▶ Hydronic System
- ▶ Total cooling capacity: 455kW
- ▶ Total heating capacity: 594kW
- Installed appliances: 2 ERACS-Q/B 2022



2011 Great Britain (London) **BRUNEI GALLERY**

- ▶ Hydronic System
- ► Total cooling capacity: 455kW
- Installed machines: 1x TECS2/SL-CA E



2006 Italy (Milan) TRIENNALE

- ▶ Hydronic system
- ► Total cooling capacity: 400kW
- ▶ Total heating capacity: 400kW
- Installed appliances: 2 ERACS-Q



2005 Spain (Malaga) **MUSEUM PICASSO**

- ▶ Hydronic System
- ► Total cooling capacity: 1000kW
- ▶ Total heating capacity: 1200kW
- Installed appliances: 5 ERACS-Q, NECS-Q



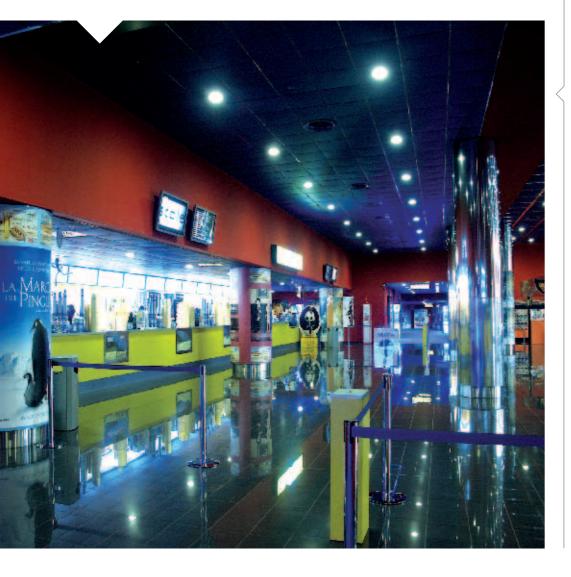
2004 Italy (Turin) **MUSEUM MOLE ANTONELLIANA**

- ▶ Hydronic System
- ► Total cooling capacity: 500kW
- ▶ Installed appliances: GHP



HEALTHCARE

2006 Italy (Como) **CINESTAR**





All-air System

Total air flow: 170,000 m³/h

Installed machines: 16 WHISPER-HALL units

PROJECT

11 halls multiplex equipped with cutting-edge projection technologies, the Montano Lucino CINESTAR multiplex is completely air conditioned by Climaveneta units, and controlled by a FWS supervision system also by Climaveneta.

CHALLENGE

Climaveneta has managed the air conditiong of the whole complex, pomprising 11 halls, fover, projection rooms, offices, shops and tecnical rooms

SOLUTION

16 Rooftop HALL-MX reversible units, specially designed on purpose to suite multiplex applications, are dedicated to the 11 halls, entrance and foyer, with 170,000 m3/h air flow. Offices are equipped with a reversible hydronic system with 30kW total cooling capacity and 32kW, whereas the cash desks, technical areas and shops employ a direct expansion sistem providing 65kW total cooling capacity and 72 total heating capacity.



Hydronic System

Total cooling capacity: 3000kW

Installed machines: 3 FOCS 4822/B

PROJECT

The Al Quisais Rehabilitation centre offers high quality medical treatment in that prestigious region in Dubai.

CHALLENGE

The relevance of ideal comfort for health and recovery, together with the will to keep also from this point of view the high standards of the clinic, required an air conditioning system conceived for offering perfect temperature and humidity conditions, with lowest sound levels and no aesthetical impact on the modern design of the building.

SOLUTION

For this project the consultants chose three Climaveneta air cooled FOCS 4822/B units, with screw compressors and R-134a, that can provide a very versatile, efficient and silent solution for ensuring the highest level of comfort, all year round with very extended operating limits and the absolute reliability of a world leader in air conditioning.

2008 Dubai (Rehabilitation centre at Al Quisais) **REHAB CENTRÉ**





- ▶ Hydronic System
- ► Total cooling capacity: 190kW
- ▶ Total heating capacity: 206kW
- Installed appliances:



- Installed machines:



2005 Italy (Porto S. Elpidio) GIOMETTI **CINEMA**

- Installed appliances: Several rooftop units, monitored by FWS3000



2005 Italy (Bari) **MOLFETTA OUTLET - CINESTAR**

- ► Total cooling capacity: 1130kW
- Installed appliances:



2009 Switzerland (Aarau) **KLINIK** HIRSLANDEN

- ▶ Hydronic System
- ► Total cooling capacity: 340kW
- Installed appliances: FOCS-W D 1502



2007 United Kingdom (Southampton)

PRINCESS ANNE HOSPITAL

- ▶ Hydronic System
- ▶ Total cooling capacity: 590kW Installed appliances:
- 2 TECS-HF 2AS



CAREGGI'S TEACHING HOSPITAL

- ▶ Hydronic System
- ▶ Total cooling capacity: 3000kW
- Installed appliances:
- 4 FOCS-CA/SL



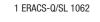
2002 Spain (Barcelona) **SAN PAOLO**

▶ Hydronic System

HOSPITAL

- ► Total cooling capacity: 10MW
- ▶ Total heating capacity: 7MW
- Installed appliances: 9 chiller with screw compressors for 4 pipes systems







- ▶ Hydronic System
- ► Total cooling capacity: 161kW
- 1x NECS/SL 704

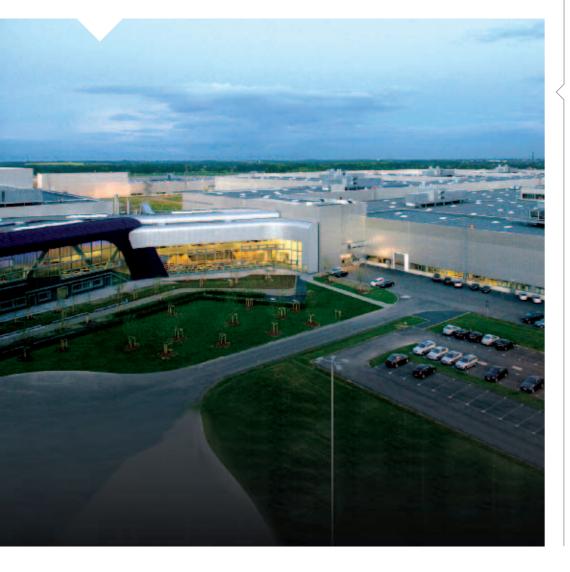
- ► Total cooling capacity: 977kW

- 12 rooftop units

TELECOMMUNICATIONS

2007 Germany (Leipzig)

BMW PLANT LEIPZIG



Project: Zaha Hadid



Hydronic System

Total cooling capacity: About 3MW

Installed machines: Several Climaveneta chillers and NECS

PROJECT

With over 5.400 employees and 45 hectare built area, the BMW Plant Leipzig is a masterpiece of architecture, efficiency and sustainability.

CHALLENGE

The iconic central building of the famous London Architect Zaha Hadid elegantly links the everal production blocks, organized for highest sustainability and careful and environmental friendly use of resources.

SOLUTION

For the process cooling of several production blocs BMW has chosen Climaveneta BH/SRAT and NECS air-cooled high efficiency chillers, featured by extended operating limits and by an extraordinary energy efficiency ratio at full and part load.



Total cooling capacity: 2800kW

Hydronic

System

Total heating capacity: 2400kW

Installed machines:

2 Climaveneta air cooled chillers with EC-fans and free-cooling

PROJECT

Sony Ericsson, the joint venture between Japan-based consumer electronics maker Sony and Swedenbased Ericsson, was established in 2001 to combine the cell phone operations of both companies.

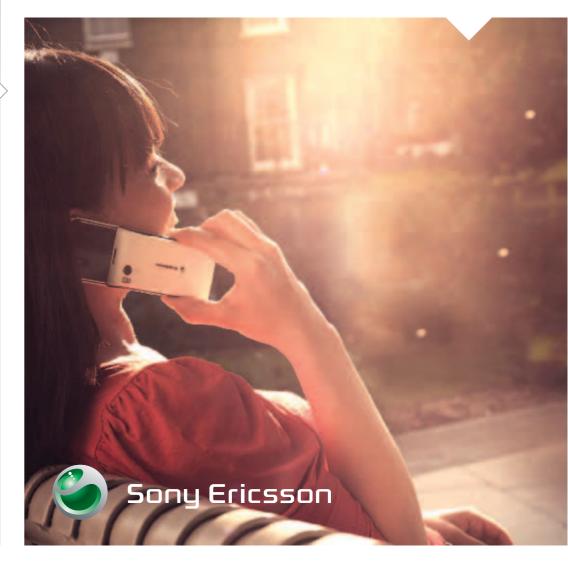
CHALLENGE

A high level of functionality combined with reliable performance were the driving forces behind the choice of the air conditioning system for Sony Ericsson office building and data center. Increasing energy efficiency respecting the environment was the most important requirement to reduce energy consumption and CO2 emissions.

SOLUTION

For the air conditioning system of the data center. 2 Climaveneta FOCS-FC/SL with EC-fans were selected. This aircooled range, fitted with FREE-COOLING coils, is suitable for installations whenever the need for cooling continues throughout the cold months, or when the external air temperature is lower than the temperature of the liquid returning from the installation.







2004 Italy (Bari) **BOSCH PLANT**

- ▶ Hydronic System
- ► Total cooling capacity: 2800kW
- Installed appliances: FOCS-W/CA



2005 South Africa (Wellington) **WELBEDACHT WINES**

- ▶ Hydronic System
- ▶ Total cooling capacity: 96kW
- ▶ Installed machines: 1x NECS



2009 Germany (Hamburg) UNILEVER

- ▶ Hydronic System
- ► Total cooling capacity: 1800kW
- Installed machines: 2x TECS/HF



2008 Poland (Radzymin) **COCA-COLA HBC**

POLAND Plant

- ▶ Hydronic System
- ► Total cooling capacity: 1000kW
- Installed appliances: 2 FOCS/B 4222



2006 Italy (Several applications) **SHELTER** TIM

- ▶ HPAC System
- ► Total cooling capacity: 1125kW
- Installed appliances: Several HPAC units, ACCURATE range



2009 Chile **TELEFONICA CHILE**

- ▶ Hydronic system
- ▶ Total cooling capacity: 1200kW
- Installed appliances: over 20 DX aircooled units among which, Accurate AXO 55; Accurate AXU 60; Accurate AXO 20; Accurate AXO 07; Accurate AXU 50



2009 South Africa (Dieprivier) **NEOTEL DATA CENTER**

- ▶ HPAC System
- ► Total cooling capacity: 515kW Installed appliances:
- 6 AC 110 Close Control Units, 2 FOCS/B 2632

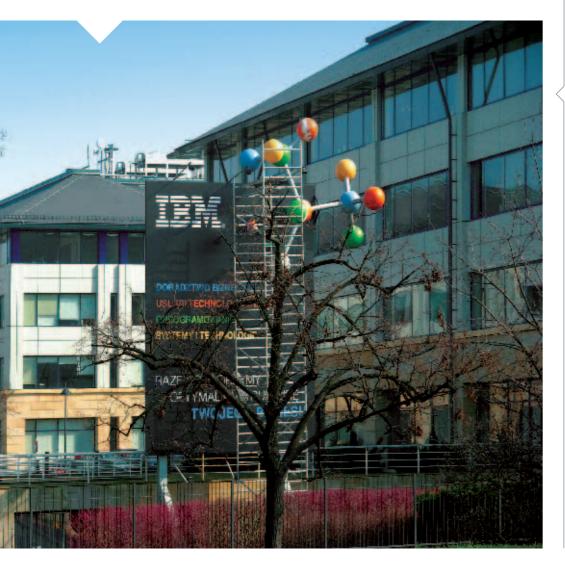


2009 Sweden (Stockholm) **TELECITY GROUP**

- ▶ Hydronic System
- ► Total cooling capacity: 640kW
- Installed appliances: 2 NECS-FC/SL 1004



IBM SERVER ROOM





Hydronic System HPAC System

Total cooling capacity: 1800kW

Installed machines: 3 FOCS-ME 1502 9 AC 070 EC 4 AC 041 EC1800A 2 FOCS-W 1902 SME

PROJECT

One of the largest IBM server room in Poland, this Warsaw hub plays a pivotal role in IBM operations.

CHALLENGE

The very high thermal loads of this large installation required an articulated solution combining high precision air conditioners with water cooler chillers and condenserless units.

SOLUTION

2 Condenserless units FOCS-ME and 2 FOCS-W water cooled chillers with screw compressors are combined with 9 ACCURATE high precision air conditioners AC 70 and 4 AC 40 ensuring optimal performances both at full as well at part loads.

Designer: Arab Bridge



Hydronic System

Total cooling capacity 1050kW

Total heating capacity 1113kW

PROJECT

Build by the Jordan Arab Brige, with its 84 meters the Rodriguez Aquastrada TMV 84/2 is conceived for transporting over 700 passengers and 70 cars, at a speed of 40 nodes.

CHALLENGE

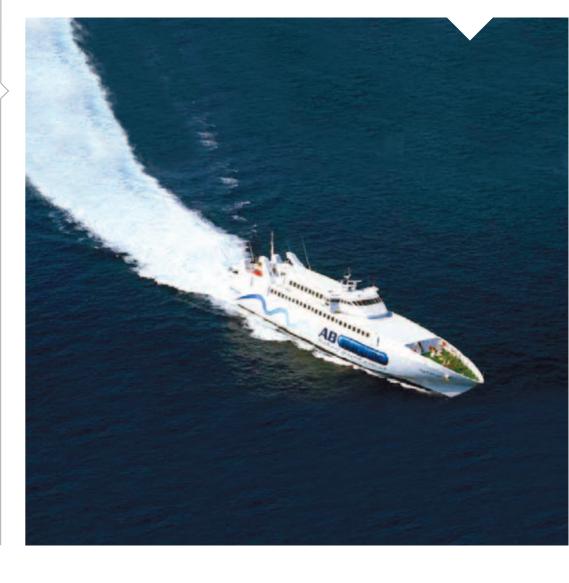
For the prefect comfort of the passengers this application required an advanced system, that with a high energy efficiency could provide for perfect temperature control and optimum air renewal.

SOLUTION

For this application Climaveneta has created a centralized supervision system with touch screen controlling 7 water/water heat pumps developed on pourpose for naval application, equipped with titanium intermediate exchanger.

Thanks to the chance to employ sea water for heat exchange, the system is extremely efficient. The system is completed by 45 hydronic terminals ducted with flexible alluminium ducts.

2004 Italy (Cantieri Navali Pietra Ligure) RODRIQUEZ AQUASTRADA TMV84/2





BOUYGUES

- ▶ HPAC System
- Installed appliances: 7x i-AX 018 Unità Close Control, 1x i-AX 029 Unità Close Control, 2x i-AX 070



WALHALLA GREEN

- ▶ HPAC System



- ▶ HPAC System
- ► Total cooling capacity: 14kW
- ▶ Installed appliances: 10 AW 10-15 Close Control Units



2010 Tunisia (Tunis) **PWC-PRICEWATERHOUSE**

- ▶ HPAC System
- ▶ Installed appliances: 2 i-AX



2004 Italy (Genoa) **ADMIRAL 85 OPEN LAVAGNA SHIPYARD**

- ▶ Hydronic system
- ▶ Total cooling capacity: 54kW
- Installed appliances: Naval Units



2004 Italy (Messina) **RODRIQUEZ TMV 50 MESSINA SHIPYARD**

- Dedicated heat pumps
- ► Total cooling capacity: 403kW
- ▶ Total heating capacity: 4075kW



2004 Italy (Pietra Ligure) RODRIOUEZ **EXPLORATION YACHT 72** PIETRA LIGURE SHYPIARD

- ▶ Dedicated heat pumps
- ▶ Total cooling capacity: 872kW
- ▶ Total heating capacity: 1097kW
- ▶ Installed appliances: Ductable and flexible hydronic terminals in lagged spiral aluminium.



2012 Greece (Piraeus) **HARMONY A**

- ▶ Hydronic System
- ▶ Cooling capacity: 500kW
- ▶ Heating capacity: 540kW
- Installed machines: 1x RECS-W/B 2152





- ► Total cooling capacity: 324kW
- Unità Close Control



- ► Total cooling capacity: 120kW Installed appliances:
- 2x AB 050 Close Control Units





- ▶ Total cooling capacity: 55kW
- 29Close Control Units







SECONDARY SERVICES

Quality of a solution, the excellence of the performances and the satisfaction of the final user depend very much on how the company supports the customer after the sales phase and the start-up.

Hence after sales service is a core component of Climaveneta's marketing mix.

Our after sales network ensures the closest presence to the customers, everywhere in the world, through:

- More than 50 technical assistance centres in Italy.
- The technical assistance centres of our subsidiaries in Germany, France, Spain, China, Poland, India and UK.
- More than 200 assistance centres in the world.

A complete range of contract solutions and after-sales services for supporting the customer through the whole life cycle of the system.



To get in touch with our sales and service centres or to find our more about us, our products and services, please refer to our website

www.climaveneta.com

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