

STULZ
TECNIVEL



Air Handling Units

ClimaPac



Experience

Flexibility

Efficiency

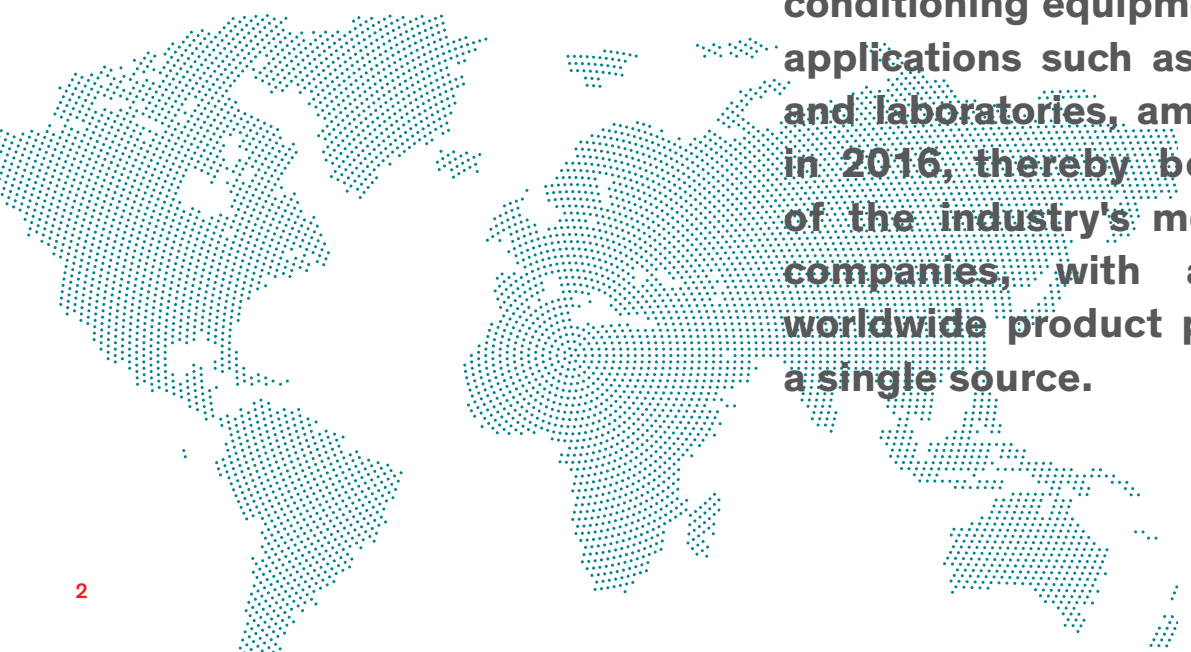
Reliability

Service

Quality

**“There is strength
in numbers”**

Aiming to combine knowledge and offer a complete solution for the market's needs, Tecnivel merged with German multinational firm STULZ – a leader in precision air conditioning equipment for critical applications such as data centers and laboratories, among others – in 2016, thereby becoming one of the industry's most important companies, with an extensive worldwide product portfolio from a single source.





50 years on the market are a testament to our experience

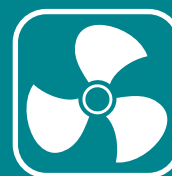
Personalized attention, a customer focus, an entrepreneurial spirit, full support and extensive experience in air conditioning systems have laid the foundation for STULZ Tecnivel's growth for nearly 50 years.

To meet the market's most demanding requirements, our main competitive advantage is our ability to deliver personalized solutions with multiple configurations. We are so flexible, both in terms of delivery times and the particular specifications of your projects, that we offer you the best technical consulting and aftermarket service with the highest level of professionalism.

Quality at your disposal

Since its founding in 1971, our name has been synonymous with high quality, innovation and continuous improvement, with a special focus on comfort, well-being, and energy efficiency, and a serious commitment towards reducing our environmental impact.

We are manufacturers and—with the goal of ensuring maximum reliability and quality—we select the best components on the market from the most qualified suppliers, using state-of-the-art production methods and very strict checks that comply with the ISO 9001 certification granted by the TÜV and with the EUROVENT certification.



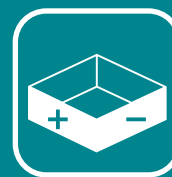
AHUs



CONDENSERS



DRY COOLERS



FANCOILS



AIR HEATERS



AIR CURTAINS



COILS

New production plant

Greater production capacity
and equipment optimization





.....
📍 Toledo, Spain



.....
**40.000 m² with the latest production processes
and cutting-edge machinery.**



Flexible and customized solutions.
High performance and excellent energy efficiency.



ClimaPac

+ FOR -



- ✓ Flexibility Multiple configurations
- ✓ Modular configuration Tailored to every need
- ✓ Energy efficiency State-of-the-art components
- ✓ Air quality Different filtration solutions
- ✓ Integrated control Operational optimization
- ✓ Sandwich panels 45 mm thickness
- ✓ Rockwool insulation 100 kg/m³

Versatile Air Handling Units

Knowing that every project is unique and requires different specifications, ClimaPac includes an extensive range of Air Handling Units to meet the most demanding needs and applications.

To achieve maximum comfort and air quality, we develop energy efficient solutions using our extensive technical know-how and industry experience manufacturing AHUs for half a century.

Smaller size, same performance

STULZ Tecnivel is now expanding its range of Air Handling Units with compact configurations and smaller sizes that are adaptable to installations with less available space. Ventilation solution with a “plug & play” design, low sound levels and reduced footprint for singular applications.



Countless applications



Hospitals



Universities



Shopping centers



Industry



Hotels



Wineries



Pharmaceutical Laboratories



Offices

Certifications that assure the ClimaPac series' performance

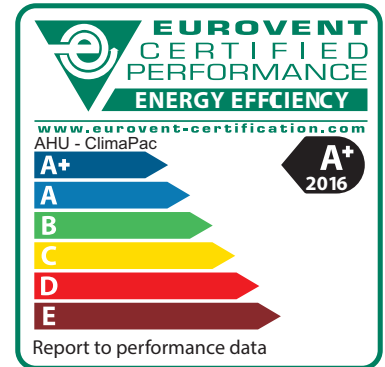
Eurovent certification

STULZ Tecnivel is Corresponding Member in the Eurovent Association.

The ClimaPac range participates in the Eurovent Certification Program for Air Handling Units.

Verify the certificate's validity:

www.eurovent-certification.com



ISO 9001 certification

STULZ Tecnivel meets the ISO 9001 quality management standard, a certification granted by the TÜV.



Directives

The ClimaPac range complies with the following directives:

EC Machinery Directive 2006/42/EC

EC Directive for Low Voltage 2014/35/EU

EC EMC Directive 2014/30/EU

EC Ecodesign Directive 2009/125/EC

(Commission Regulation no. 1253/2014)



We bring your projects to life

STULZ Tecnivel is fully involved in the customization of each quotation by conducting preliminary studies and advising you so that you can purchase equipment that is tailored to your needs. We offer customized solutions for each type of installation.

The world's most prestigious companies choose us, and our products can be found on the facilities of the most well-known hospitals, airports, hotels, offices, schools, public buildings, wineries, banks, industries, and a long list of other applications, since we meet the needs of your installation.



Mechanical performance

According to EN1886

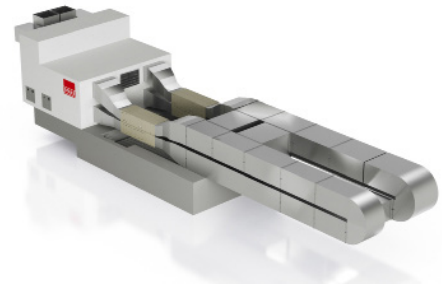
Characteristics		Class					
Casing strength		D1					
Casing air leakage		L1					
Filter bypass leakage		F9					
Thermal transmittance		T2					
Thermal bridging factor		TB2					
Acoustical insulation of casing							
Hz	125	250	500	1k	2k	4k	8k
dB	16	12	13	23	28	38	43

Operating temperatures

The usual operating temperature range for a standard configuration is $-20/+40^{\circ}\text{C}$ [$-68/+104^{\circ}\text{F}$] *

*The operating temperatures will depend on the final configuration, specifically on the components that will be included in the unit. For more information, please consult the installation, operating and maintenance manual.

Test Center



Test rig

STULZ Tecnivel has its own state-of-the-art facility to test the operation of their AHUs, simulating the different extreme ambient conditions that the project, studio, etc. may require.

Furthermore, it provides recorded information about the performance of the unit, such as basic efficiency, energy or water consumption data.

Testing parameters

- Functional testing by simulating different alarms
- Visual inspection of the unit
- IT room load up to 520 kW
- Air flows up to 160,000 m³/h
- Temperature range: +10°C to +50°C
[+50°F to +122°F]



Product information



Ventilation and air renewal are crucial for any installation. Because of this, and due to the individual configuration of each equipment, we customize the air volume and filtration, heating, air conditioning, humidification, or dehumidification conditions requested by the customer.

The needs of each ventilation system differ in every project. Aware of the importance of tailoring to different environments, we use state-of-the-art components to reach the greatest energy efficiency and air quality possible in your different projects.

The use of top-quality components in the unit's design helps to increase the system's life cycle, ensuring safety and reliability at all times.



Panels

45 mm-thickness sandwich panel with 100 kg/m³ of rockwool insulation. Both sides of the panel are made with pre-coated sheets of painted galvanized steel (RAL7032). Fire resistance rating A2-s1,d0 and class RC3 corrosion resistance (RC5 optionally available).

Casing

Equipped with a thermal bridge breakage structure consisting on aluminum profiles and double-skinned panels (sandwich type), ensuring high classification according to EN1886.

Frame profiles

In extruded aluminum, with a thermal bridge breakage design that allows assembling panels without screws. Coated with RAL 7044 as standard or optionally available without coating.

Handles

Including a lock and a single handle per door with up to three closing positions that are adjustable on the inside. Made of nylon, class HB flame fire retardant according to UL94. Highly resistant to ensure sealing tightness.

Inspection windows

Dual transparent polycarbonate glazed window, square shaped, without mounting elements on the inside to assure thermal bridge breakage.

Approved as microbiological inert material VDI 6022. Class HB flame resistance according to UL94.

Roof

Made of coated galvanized steel and with a design that ensures weather protection.

Corners

Made of nylon (polyamide) are used to join the main aluminum profiles and ensure thermal bridge breakage. Color RAL7044.

Insulation

45 mm Rockwool insulation with 100 kg/m³ density.

State-of-the-art components

Optimized energy efficiency

Heat recovery



According to EN13779

There are different types of energy exchange solutions that deliver high efficiency for different applications:

- Cross-flow plate heat exchangers (different geometries and also available in epoxy)
- Rotary heat exchanger
 - Enthalpy
 - Absorption
 - Condensation
 - Epoxy
- Run-around coils: Dual coils for applications that require strict separation of air flows, whether to comply with hygiene standards or for safety reasons.



Dampers



According to EN 1751:2003:

Tightness class 2 dampers 100% aluminum (anti-corrosion)

Other tightness classes available.

Filters



High-efficiency with low pressure drop. Different types available according to the new ISO 16890:

Panel filters (Coarse, ePM10 and ePM2,5)

Compact filters (ePM10 and ePM1)

Bag filters (Coarse, ePM10, ePM2,5 and ePM1)

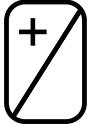
HEPA filters (E10 to H14)

Please inquire about other filtration options.

Coils



Standard construction with copper tubes and aluminum fins. The following are available for selection:



- Chilled water, hot water, glycol heat exchanger coil.
- Evaporation coils (DX systems)
- Condensation coils (DX systems)

Tubes, fins and frame available in different thicknesses and finishing materials (epoxy, Cu-Cu...).

Please consult us about other options.



Fans



Plug fan:

- EC motor IE4
- AC motor IE3

Wide selection of fan layouts:

Fan array configuration to achieve high airflow volumes.

Please ask about other fan and finish options.

Humidifiers



- Ultrasonics

- Additional adiabatic cooling effect.
- Approved for hygienic operation according to the VDI6022 Standard.
- Reduced energy consumption: approx. 60 W per 1 kg/h of humidification capacity.

- Panel evaporative humidifier

AISI304 Stainless steel frame.

Non-combustible panel made of inorganic material (fiberglass), thereby giving it a high saturation efficiency and low pressure drop.

Can be hygienically certified according to the VDI6022 standard.

- Spray banks

Spraying via a network of nozzles. Finishes made of different materials based on project requirements, including the control system.

- Steam generators

Two types of steam generators available:

- Resistances
- Electrodes

Generators can be supplied with different types of steam dispersion systems that allow for a very compact AHU section due to the short absorption distances.

Please ask about other options.

Sound attenuator



Aerodynamically composed of casings and can be tailored to each of the Air Handling Units' internal dimensions.

High sound spectrum damping capacity.

Direct/indirect air heating burners

Gas heating systems:

- Direct system via an air stream
- Indirect system via combustion chambers

Modular configuration



Predefined sections

Thanks to our selection software, you can design your Air Handling Unit (AHU) with maximum flexibility.

Choose one of our 50 standardized sizes based on your projects' air flow needs and receive the latest in energy recovery technology (rotary, static, heat exchangers; run-around coils, etc).

Build your AHU with the implementation that best suits your space requirements (double deck, double height, in-range...).

Incorporate all the sections that you need for filtering, moving, and treating the air (coils, fans, filters and humidifiers, among others).



Flexible unit design

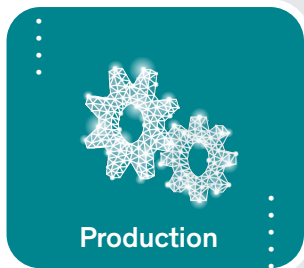
You can rearrange the modules/components or add or remove them in any of the predefined configurations to meet your project's specific requirements.

The right solution for every need



Pure engineering

For STULZ Tecnivel, ensuring the quality of its equipment is our utmost priority.



To this aim, we have state-of-the-art technology and design and manufacture Air Handling Units under high production standards with strict technical quality controls and factory supervision; we even pay attention to the most minute details along all processes.



We create made-to-measure equipment based on flexibility and put our extensive experience in engineering, mechanics, electronics, and thermodynamics at your disposal to develop innovative and reliable solutions.





**Committed to
sustainable energy use**

“Air quality and comfort”

Efficient solutions

Air conditioning systems represent an important percentage of energy consumption in the whole installation. This is why STULZ Tecnivel applies its extensive market and engineering experience to develop energy-efficient HVAC solutions, thereby reducing the environmental impact and CO₂ emissions without compromising indoor air quality and comfort.

Aiming to achieve the greatest energy efficiency, ClimaPac's range uses state-of-the-art components whose main characteristics are low energy consumption and high efficiency.





Selection software



Reports and drawings

Our selection software is continuously in development and improvement.

With an user friendly interface, this powerful selection tool can easily and quickly design Air Handling Units, allowing the user to quickly calculate various projects.

Results

- Intuitive tool
- Fast selection
- User friendly interface
- Multilingual
- List of control signal points and field equipment
- Drawings with real dimensions



Reports and drawings

TIP allows you to create and download the following documentation:

- ✓ Detailed technical specification sheets.
- ✓ 2D drawings with real dimensions.
- ✓ Technical specification texts.
- ✓ Quotations.

Integrated control



Save on installation costs and improved energy efficiency



The ClimaPac range contains a regulation and control system. The controller can efficiently manage the different available configurations.

Integrated control solutions directly from the factory improve energy efficiency and at the same time reduce installation costs.

Control

- Modular plug & play AHU with low installation costs.
- Configured at the factory to improve unit operation.

Communication

Different types of protocols available:

- BACnet (IP; MS/TP)
- LON
- Modbus (RTU; TCP/IP)
- Web

Field material

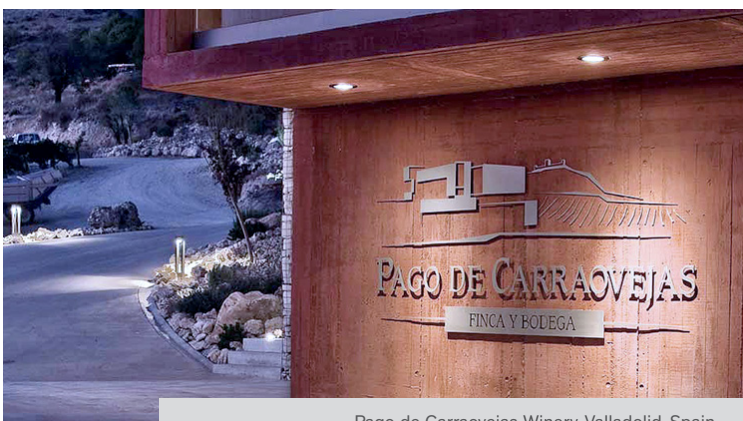
Multilingual controller with expansion modules and all the associated field equipment (actuators, valves, probes, pressure switches, etc.).



Our brand is trusted by major properties



Complutense University of Madrid, Spain.



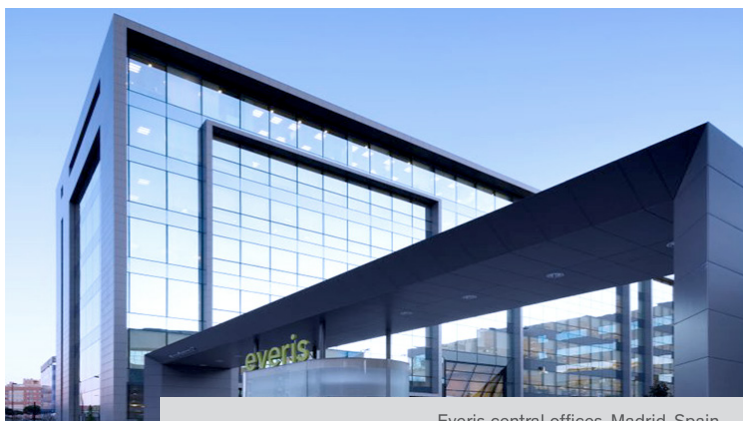
Pago de Carraovejas Winery, Valladolid, Spain.



MD Anderson Cancer Center, Madrid, Spain.



Hotel RIU Plaza de España, Madrid, Spain.



Everis central offices, Madrid, Spain



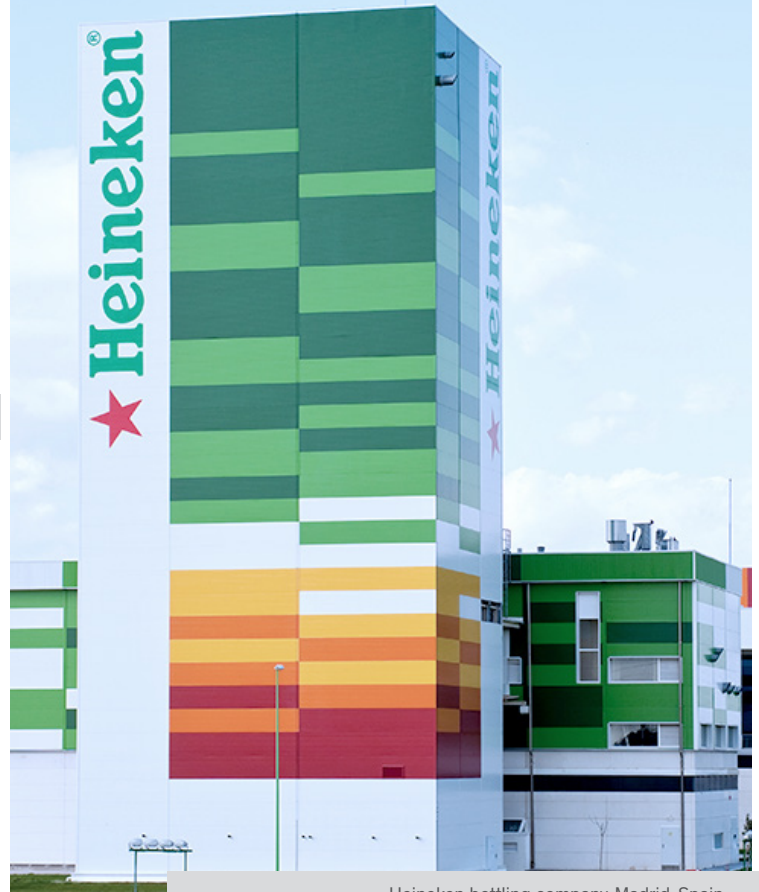
Nestlé factory in Sebares, Asturias, Spain.



John Deere factory, Madrid, Spain.



Robert Bosch, Madrid, Spain.



Heineken bottling company, Madrid, Spain.



Telefónica JC8, Madrid, Spain.



Hospital Fundación Jiménez Díaz, Madrid, Spain.



Hotel Palladium Costa Mujeres, Cancun, Mexico.

Everywhere

From a single source.



Personalized
Support



Flexibility
Adaptability



Energy
Efficiency



Specialized
Service



Proven Quality



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