

AGUAS DE IBIZA *****

Ibiza - Spain

Hotel Spa & Resort

76 suites and 36 De Luxe rooms

Hydronic System

Year 2008



Aguas de Ibiza Spa & Resort is a charming hotel by the sea in Santa Eulalia Bay, a famous tourist port in Ibiza. The structure is mostly made up of Suites and on the fourth floor hosts Cloud 9, a luxurious hotel in a hotel including the spectacular Presidential Ibiza Loft and eighteen exclusive Suites with refined wooden flooring, Jacuzzi hydromassage bath tubs on private terraces and Bang & Olufsen televisions in every setting.

Naturally, the settings had to offer total comfort. The systems also had to be perfectly integrated into such refined structures, invisible and inaudible to the guests.

The Challenge

It was the Torres family, already a lead-player in Ibiza with its numerous hotels, who wanted a new generation of luxury accommodation, which was able to renew the image of the island and attract a more selective, environmentally aware tourism.

With Aguas de Ibiza, the commissioning customer intended to create a new Eco-luxury category, appealing to the most advanced and effective technology available which could guarantee maximum comfort for guests and the most efficient use of the energy sources.

Thus, the institutional communication developed both these themes as strongly differentiating elements.



Aguas de Ibiza – Exterior view and the Revival Wellness Club
www.aguasdeibiza.com

The Building

- Structure on four levels

The size

- 112 including De Luxe Rooms and Suites
- 1,500 m² Luxury ThalassoSpa and 400m² for events

The team

- Commissioning family, Torres, Spain
- Architectural project, Triade Studio, Spain
- Mechanical systems design 2 Pi R Ingenieros 1, Spain
- Mechanical systems production Humiclima Est, Spain

About Ibiza

Unesco has declared the island in the Mediterranean Balearic archipelago a World Heritage Site for its biodiversity and culture. Ibiza is well-known for the richness of its ecosystem, the dense vegetation of its seabeds, its archaeological ruins and the ancient architecture of its villages. It is a tourist destination which is also very popular for its legendary night life and world-famous clubs.

The solution

The entire Aguas de Ibiza system design was aimed at the rational use of energy.

The lighting can count on the wide use of low-energy light bulbs, on LED lighting and automatic light intensity control systems. The spectacular glass surfaces are equipped with solar shielding and low transmission surfaces. Where possible, the sanitary water is recycled for the irrigation system, while the exterior lighting is powered by a photovoltaic production system. Even the courtesy cars are equipped with electric motors or with hybrid technology, and the use of plastics materials is carefully managed.

Thus, it is natural that the energy production for the heating and cooling system was chosen to offer maximum year-round efficiency. These water-to-water heat pumps, from the SPINchiller series, offer very high-yield at part-load, thanks to the use of several Scroll compressors for each circuit and a thermostatic electronic control valve as standard.

The reverse cycle, or rather moving from cooling to heating and vice versa, takes place in the hydraulic circuit by means of everyday valves in the system. In both operating modes, the electronic unit control automatically adapts the capacity supplied to the real needs of the building.

Furthermore, in the super silenced version, the technical sound-proofing compartment which encloses the compressors enables the acoustic emissions to be further reduced.

The use of the heat pump also enables energy recovery to take place, providing air-conditioning and at the same time producing the hot sanitary water needed for use in the hotel *for free*.

The Results

On its official site, Aguas de Ibiza confirms that the production system used offers 30% greater efficiency in comparison with traditional air-conditioning systems.

Together with the other high-efficiency technologies used, from the lighting to the unusual glass surfaces, the Clivet units work to generate *energy savings of around 35% in terms of the total consumption of the hotel, without penalising performance and quality*.

For further information about Clivet systems:
www.clivet.com



Cálculo de ahorros en consumo energético

con las medidas actuales estimamos un ahorro de energía entorno a un

35%

en el consumo total del hotel, sin restar prestaciones y calidad

Aguas de Ibiza - Water-to-water heat pumps and the final user's declared savings

The System

- Two Clivet super silenced SPINchiller WSH-SC water-to-water heat pumps, with high-efficiency Scroll technology and hydraulic circuit switching
- More than 700 kW of overall cooling capacity

About SPINchiller

A range of coolers and heat pumps offering maximum annual efficiency (ESEER) for mainly partial load applications, such as civil air-conditioning. The use of several Scroll compressors in the same cooling circuit ensures a greater exchange surface area at a reduced load, therefore lowering consumption even by 50%, increasing reliability thanks to their toughness and world-wide diffusion and improving maintenance due to their modular design and limited bulk.