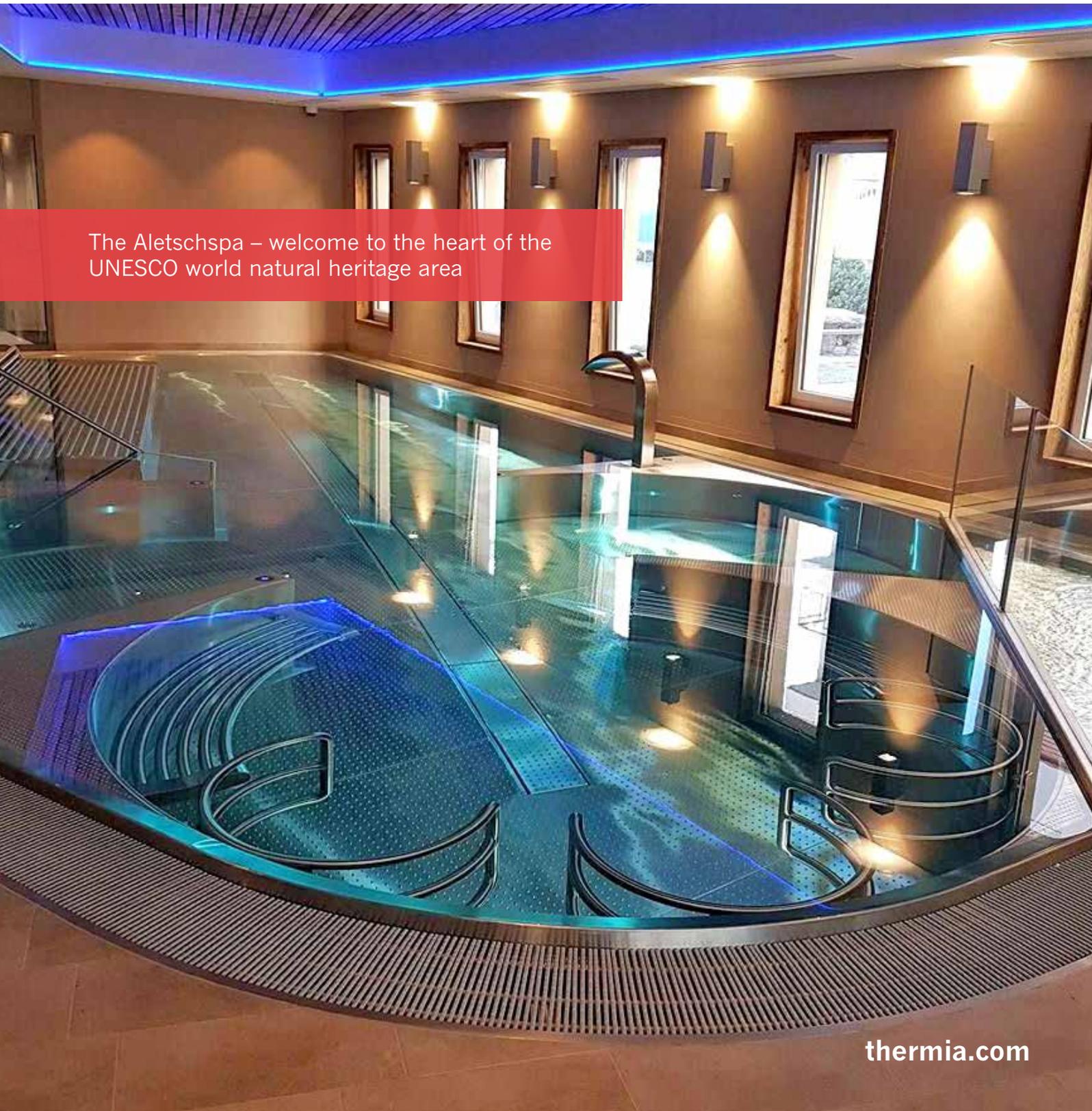


Modern spa and wellness in the heart of the Alps benefits from green technology.

The Aletschspa – welcome to the heart of the UNESCO world natural heritage area





The Aletschspa

Welcome to the heart of the UNESCO world natural heritage area

The Aletschspa is a modern spa and wellness center located in Naters in Switzerland, amid the beautiful mountain scenery of the Alps. Aletschspa is part of the Alex**** Hotel, which offers modern, spacious and bright rooms, a conference center, restaurant and its own golf course right on the doorstep.

The Aletschspa is the newest part of the Alex hotel and is fully dedicated to spa and wellbeing facilities. It features an 80 m² pool and offers many ways to relax, from the ergonomically shaped bubble loungers to the air-filled “aqua rondo” water station. The spacious pool has enough room for aqua-fitness. Children can enjoy splashing around in the small fountain in the separate children’s pool.

The Aletschspa offers extensive spa services such as the aroma steam bath, sauna, tepidarium and the saltwater graduation tower. In addition, Aletschspa features a private spa, where selected rooms can be individually booked. The pool area is located on the ground floor, with a gym, therapy rooms and conference room on the second floor. The basement is used to house the engineering and heating room as well as a car park.

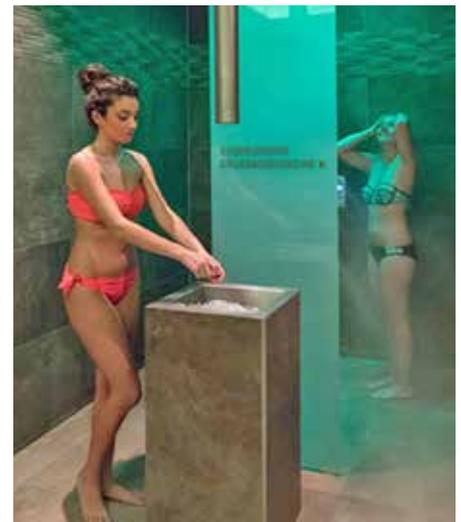
Low-carbon system in a modern, energy-efficient spa and wellness center

The Aletschspa is heated by two inverter-driven Thermia Mega ground-source heat pumps with

a heating capacity of 14-59 kW. Ground water with a temperature of around 10°C is the energy source for the heat pump. The heating system covers floor heating as well as pool and floatation pool heating.



Floatation pool



Shower and ice generator in sauna



Sauna



Sauna

Cooling (air-conditioning) is provided by passive cooling, which means that energy to cool the facilities comes from the ground water. The installation features a cold buffer tank with a volume of 1,872 liters.

Domestic hot water is provided by a compact heat transfer station mounted on one of the tanks. The primary side uses returned (re-used) hot water to heat the clean domestic water. The advantage of this is that the inverter technology, heat transfer station and hot gas technology combine to provide more hot water at a higher temperature. This removes the need for a hot water tank and eliminates potential problems with legionella bacteria as all hot water

is produced 'just in time'. The heating system includes a hot buffer tank with a volume of 1,950 liters, known as "combi" boiler. The upper part is heated by the hot gas supply line from the Thermia Mega heat pump while the lower part is charged by the heating supply line. This buffer tank is designed to reach optimum layering across the whole tank. The upper part reaches over 70°C and the lower part between 40°C and 35°C, which is enough to serve the heating system. Two combi boilers were installed in the Aletschspa to increase available volume.

The Thermia Mega solution not only provides high volumes of heat and hot water. It also adds to the value of the newly built property,

with the highest standards of construction and design. The combination of energy savings, value added to the property and the increased comfort enjoyed by guests will result in a faster return on investment than any comparable alternative.

'Thanks to Thermia's modern and efficient geothermal energy system, the new Aletschspa can entertain its guests in the knowledge that they are caring for the environment and saving money.'

says Milos Bill, Managing Director, eta Group



Thermia Mega - inverter-driven ground source heat pumps

Fact Box

Type of building:

Spa and wellness center

Location: Naters, Switzerland

Characteristics of the building

- Heated area: 1500 m²
- Heating, hot water and cooling
- Heat demand: approx. 100 kW

Applied solution:

- Renewable heating
- 2 x Thermia Mega L 14-59 kW
- Ground source: ground water approx. 10 °C
- Supply temperatures: heating up to 55°C , hot water: 55°C up to 80°C with hot gas

Completion date: Spring 2017

eta Group GmbH – LEADING PARTNER IN HEATING AND RENEWABLE ENERGY IN SWITZERLAND

The eta Group GmbH was established in 2010. As an independent company, it offers various services and products in refrigeration and renewable heating technology.

The strength of the eta Group lies in systemic thinking. The energy systems we supply are designed in such a way that they can be optimally integrated into existing systems and thus achieve the highest possible energy savings.

Our services cover all phases of the project: decision-making, design, installation, commissioning and after sales maintenance.

The eta Group has expertise in providing a full range of services, from the initial meeting and feasibility study through to a complete and sustainable turnkey solution.



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For the last 50 years, we have dedicated all our resources and knowledge to developing and endlessly refining one product: the heat pump. Our focus on geothermal energy has given us world leading knowledge in heat pump technology.



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Developing truly sustainable renewable energy solutions can only be achieved with passionate, dedicated, and uncompromising experts. Some of Europe's most highly qualified engineers can be found in our own R&D center.



Born in Sweden

All our products are designed, manufactured, and tested in Sweden using the latest technology and the highest quality components. We are proud to count world-leading industry specialist, Danfoss, among our technology partners.

