



REFERENCE

Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE



TA Hydronics deliver the highest TA-FUS1ON installation in the world



FACTS

Project Type:	Ski resort renovation
Location:	Austria
Consultant:	A 3
Installer:	Eberharter Installationsges.mbH
Project Value:	€10 million
Customer investment:	€30,000
Products used:	TA-FUSION P and C (DN 32 to DN 80), TBV-CMP, STAD/STAF, Pneumatex Transfero TV 4.2 500l, Statico 400l

The Hinterlux Glacier ski resort needed to guarantee the perfect fine dining experience for visitors to its centrepiece, multi-million euro Tuxer Fernerhaus restaurant. As such, project consultant A 3, contracted to specify the balancing, control and pressurisation solutions to improve heating system efficiency, required an expert partner. **TA Hydronics had the know-how and capability to deliver the energy efficient and sustainable HVAC solutions to meet the resort's indoor climate requirements.**

Built in 1969, the Tuxer Fernerhaus was initially expanded and renovated in 1982, and again in 1987. Located in the heart of Austria's only year-round ski resort, the restaurant's latest renovation forms part of a wider initiative to ensure a welcoming and relaxing experience for guests. The renovation added 35 studio apartments, providing luxury accommodation for the resort's staff and saw the replacement of the resort's stairways with escalators.

The challenge

Thanks to the inclusion of panoramic windows and high ceilings, the Tuxer Fernerhaus utilises natural light to create a bright and welcoming interior. Overcoming the issues of solar gain and heat retention, in the face of external temperatures which can range between 25°C and -25°C, provided a significant obstacle for A 3.

A 3 specified the installation and integration of a new biomass fired heating system, to ensure a sustainable yet, comfortable internal climate throughout. As such, this demanded the expertise and close working relationship between A 3, TA Hydronics and Eberharter.

The solution

Working in partnership with A 3, Eberharter and TA Hydronics provided full support from the initial design phase through to working with the installer on the integration of the new biomass heating system with the resort's existing system and new boiler room.

The heating system solution from TA Hydronics incorporated a combination of high performance STAD and STAF balancing valves, as well as Statico 400l pressure expansion vessels and a Pneumatex Transfero TV 4.2 500l pressure maintenance device. In addition, the solution from TA Hydronics comprised the installation of the company's TA-FUSION pressure independent control and balancing valves, which ensured the installation of the innovative product to date at 2,660m above sea level.



TA-FUSION is the first valve range to combine control and balancing in a single unit, unique in its fully adjustable kvs, which meant the system could adjust to the changing demands much more easily.



With the total design, supply, installation monitoring and system commissioning solution, and on-going support, TA Hydronics was able to combine its technical competence with a support service to provide the solution the project required.

The outcome

The complete TA Hydronics balancing, control and pressurisation solution has achieved optimised return temperature and significant energy efficiency savings, which have successfully ensured the optimum indoor climate across not only the Tuxer Fernerhaus, but the wider resort.

"TA Hydronics' HVAC expertise and support is unrivalled and so, from the outset, we were confident that it would successfully address our energy efficiency and indoor climate comfort requirements."

Robert Schmitzer, Managing Director at A 3