

EDITION 2021

english

# SNOW EXPERTS

MAGAZINE

TECHNOALPIN®

THE FUTURE.  
TODAY.

- > **TT10** POWER ON TOWER
- > **TL** RANGE OF LANCES
- > **ATASSpro**



WWW.TECHNOALPIN.COM

# CONTENTS

JUNE 2021

## 04 **TT10**

**Power on Tower**

## 06 **Norway - Gautefall**

Nordic success for the TT10

## 08 **France - Le Praz Courchevel**

Tailor made for Le Praz ski jumps

## 10 **Czech Republic - Vrchlabí Kněžický vrch**

The giant snow producer in the Giant Mountains

## 12 **TL range of lances**

**A line of lances that is revolutionizing snowmaking**

## 14 **Austria - Alpbach**

An impressive line of attack

## 16 **Italy - Madonna di Campiglio**

Incomparable in the marginal temperature range

## 18 **Switzerland - Zermatt**

Even our snowmaking team was surprised by the performance

## 20 **ATASSpro**

**The gateway to a new dimension in snowmaking**

## 26 **TechnoAlpin** employees





Walter Rieder

Erich Gummerer

## DEAR READERS,

Here at TechnoAlpin we are known for looking to the future. We can proudly claim that our drive for innovation continues unabated, even after 30 years, and we have proved this once again in 2021 – and the year is far from over yet. We have launched no fewer than three new, unique products in the last few months and would therefore like to dedicate this issue of the SnowExperts Magazine to these products.

We brought two feats of engineering to the snow-making market in April when we introduced the TT10 fan gun and the TL range of snow lances.

Snow producers with which TechnoAlpin is redefining the standards for the future. In May, we were finally able to present our new ATASSpro control software. This software is based on our experience with Liberty and ATASSplus, but we have combined the advantages of both software packages and are ushering in a new era in snowmaking automation. Both product presentations were virtual for the first time. We exploited the potential of this approach, however, to include even more depth and detail when it came to showing the inner workings and the operation of the new products.

It must be said, however, that these technological achievements are not solely down to our outstanding development team. We have always been convinced that our customers are also a valuable part of our innovation process. We would therefore also like to take this opportunity to thank you. It is only through your feedback that our snow producers can be fine-tuned to the needs on the ski slopes.

Some of our customers have already been able to run extensive tests with the TL lances and the TT10 in the last winter season. So it stands to reason that you will not only read more about these two types of snow producer and their advantages for ski areas on these pages, but also the feedback from customers after the first snowmaking season.

**Enjoy your reading!** 📖

**IMPRINT Publisher** © TechnoAlpin SpA · Via P. Agostini 2 · 39100 Bolzano · Tel. +39 0471 550 550 · [info@technoalpin.com](mailto:info@technoalpin.com)

**Responsible for stipulating** Erich Gummerer · **Editors** Susanne Ogriseq, Max Rougeaux, David Klotz ·

**Design** dv media, Varna (BZ) – [www.designverbindet.it](http://www.designverbindet.it) · **Printed by** Dialog, Bressanone (BZ) · Content may not be reproduced or used in whole or in part, including electronically, without the explicit permission of the publisher – As of: June 2021 - If you no longer wish to receive the SnowExperts Magazine in the future, please send an e-mail with your contact information to [info@technoalpin.com](mailto:info@technoalpin.com)



# TT10 POWER ON TOWER

The new TT10 tower-mounted snow gun is based on the outstanding technology of the TR10 and quite literally takes this fan gun to the next level. It combines the guarantee of the best snow quality, optimum use of resources and maximum user-friendliness with unique technology and unprecedented simplicity.

## The best just got better.

The most obvious innovation is the new tiltable tower, which turns the TT10 into a snow producer that combines the advantages of a tower-mounted machine with the ease of maintenance of a mobile snow gun. The tower can simply be tilted to allow

access to the nozzle valve ring and motor from the ground.

The TT10 is ready for immediate action and safe operation. The machine is delivered pre-assembled and therefore only needs to be mounted in place on the base in the ski area. It weighs only about 800 kg, simplifying and speeding up the installation process.



**THE TT10 COMBINES THE GUARANTEE OF THE BEST SNOW QUALITY, OPTIMUM USE OF RESOURCES AND MAXIMUM USER-FRIENDLINESS WITH UNIQUE TECHNOLOGY AND UNPRECEDENTED SIMPLICITY.**



**Catering to your exact needs.**

There is no limit to the potential for customization of the TT10 in that it can be equipped to meet any requirements. The configuration options mean there is no wasting money on unused features and no compromises when it comes to perfect performance in any ski area and in any conditions. Optional extras available for the TT10 include a touch display, meteo station, motorized electric swinging function, and height adjustment facility.



**Same standard of excellence in snowmaking.**

The TT10 has been engineered with the same level of excellence as the TR10. The nozzle valve technology enables optimum energy efficiency alongside resource conservation. The water-air cooler provides unsurpassed snow output, especially at marginal temperatures, and the nucleators with double ruby inserts guarantee top-quality snow for years. ❄️



# GAUTEFALL

## NORDIC SUCCESS FOR THE TT10

The Gautefall ski center is located in the south of Norway. This family-owned ski center offers 16 slopes for Alpine skiing, as well as 100 km of cross-country ski trails and a biathlon facility.

Gautefall is a long-time customer, probably one of the first in Norway to install an automatic snowmaking system in 1987. Today, the resort operates 60 snow producers, all lances.

In 2020, Gautefall decided to expand the snowmaking system, increasing the pumping capacity of the machine room in order to have more fire power. This project was also the occasion to purchase fan guns, with three TR8 for the cross-country slopes, but also one TT10!

**Bjørn Halvor Roalstad**, the CEO of the company, gave us his feedback and told us about the satisfaction of the snowmaking team after using the new fan gun from TechnoAlpin over the past season. "We were fortunate to work with the TT10 last season. This new snow producer, the first with fan technology we have on our alpine slopes, really fits perfectly into our snowmaking system and on our slopes". Located near the base area, at an altitude of 500 m, the TT10 also offered very high



## WE HAVE SEEN A COMPLETELY DIFFERENT WORLD WITH THE TT10 WHEN MAKING SNOW AT MARGINAL TEMPERATURE.

performance in terms of production. “We have seen a completely different world with the TT10 when making snow at marginal temperature”, says Bjørn Roalstad, underlining the efficiency of the new fan gun when the temperature conditions are difficult.

The snowmaking team at the ski center also noticed how important and useful the other features of the TT10 were. “Much like a tower gun or a lance, there’s almost no physical handling required to run the TT10. The ease of use is greatly appreciated by our team”, said Linn Katrin Roalstad, Head of snowmaking. She added that the height adjustment and

the automatic swinging of the chosen model have been very useful. These features allow snow to be distributed evenly over a large surface area.

So, what will be next in Gautefall? “After this season, we plan to change some of the existing lances and switch to this new technology, with more TT10s next year”, explained the CEO. TechnoAlpin is proud to be alongside Gautefall in its quest to secure further the snowmaking operations and successful business for the seasons to come. 🚧

[www.gautefall.no](http://www.gautefall.no)



# LE PRAZ COURCHEVEL TAILOR MADE FOR LE PRAZ SKI JUMPS

Built in 1990 to host the Olympic ski jumping events as part of the 1992 Winter Games (Albetville, FR), the Le Praz ski jump in Courchevel is one of the main ski jumping sites in France.

With four springboards, Le Praz, which is operated by the municipality of Courchevel, must offer the best possible snow conditions to practitioners of this Nordic discipline. In order to modernize the existing snowmaking system, while optimizing production costs, Courchevel called on the expertise of TechnoAlpin.

Indeed, the Le Praz site, located at an altitude of 1,300 m, frequently experiences difficult production conditions, as confirmed by Gilles Morat, in charge of the springboards: "We have to start producing

the 15,000 m<sup>3</sup> of snow necessary to operate the springboards starting mid-November. During this period, temperatures are often marginal at Le Praz. Therefore, we need machines capable of making the best use of all the available cold windows, while producing a lot."

To solve this issue, TechnoAlpin proposed installing two TT10s. After the first months of use, the new snow guns fulfilled their mission: "In marginal conditions, we were able to produce from -1.5° C wet bulb temperature, and during colder periods, we



## THE TT10 IS MUCH QUIETER THAN OTHER FAN GUNS.

used up to 460 l/s of water,” explains Gilles Morat, who was thus able to reduce the amount of time needed to prepare the snow for the jump site.

For the site manager, these new snow guns offer another significant advantage. “The TT10 is much quieter than other fan guns. Since the springboards are located 200 m from the closest houses, having snow guns with low noise emissions is something very positive for us and for the neighbors.” To accommodate the two machines, a metal platform has been specially designed and set up between

the reception areas. It will also allow summer maintenance to be done in complete safety thanks to the TT10s tilting function, which makes the main components perfectly accessible.

With this tailor-made project and the TT10s, TechnoAlpin was able to offer the optimal snowmaking solution for the ski jumps in Courchevel. 🚧

[www.courchevel.com](http://www.courchevel.com)



# VRCHLABÍ KNĚŽICKÝ VRCH

## THE GIANT SNOW PRODUCER IN THE GIANT MOUNTAINS

In the Giant Mountains, the Vrchlabí Kněžický vrch ski center is one of two ski facilities in the historical city of Vrchlabí. This is a family-oriented ski area offering intermediate skiing to winter sport lovers. With an altitude between 550 and 710 m above sea level, the weather conditions are sometimes adverse and snowmaking is important to guarantee the best snow conditions possible on the slopes.

This is particularly true on the lower sections of the slopes which are very wide and require a large amount of snow. So, the ski area needs significant fire power for its snow production. Last season, the snowmaking team at Vrchlabí Kněžický had the opportunity to use the new fan gun from TechnoAlpin, the TT10!

Let's see what **Jan Imlauf**, owner of Vrchlabí Kněžický, had to say after this first season with

the TT10. "To make snow on the lower part of the slopes, we need really powerful snow producers. The slopes are over 100 m wide, and we need to make a lot of snow and distribute it as evenly as possible. The TT10 was a perfect match for this purpose," said Jan Imlauf. Indeed, with its swinging function, the TT10 makes it possible to distribute snow across a large surface area, greatly simplifying the grooming work and cost associated to the slope preparation.



**THE TT10 IS THE BEST  
SNOW PRODUCER  
WE HAVE EVER TESTED  
ON OUR SLOPES.**

The TT10 was not only satisfactory in terms of snow quality and volume, but it was remarkably good at withstanding the windy conditions sometimes encountered at the ski resort during snowmaking operations. The resort owner added, “We have used many snow producers from different suppliers and so far, the TT10 is the best snow producer we have ever tested on our slopes. It was very simple to use and control from our ATASSplus.”

Among the other numerous advantages pointed out are the ease of installation, the compactness of the machine and its capacity to integrate into the land-

scape. “The TT10 is a slender, elegant snow producer that fits nicely on the slopes,” confirmed Imlauf. The resort owner also anticipates that maintenance will be easy thanks to the tower’s tilting function.

“It’s clear that, in the future, we would like to continue with this new technology,” concluded Jan Imlauf. So, it is very likely that we will see more TT10s on the slopes of Vrchlabí Kněžický, alongside the 5 TF10s already installed there! 🚧

**[www.skiareal-vrchlabi.cz](http://www.skiareal-vrchlabi.cz)**



## TL RANGE OF LANCES

# A LINE OF LANCES THAT IS REVOLUTIONI- ZING SNOWMAKING

With their unique design and trendsetting features, the lances in the TL range offer maximum efficiency and precision control throughout the entire temperature range.

All three lances in this range operate on the same design principle. Three different lance heads combined with the new universal lance pipe result in the different models, which differ in the number of nozzle rings: the TL8 with eight steps, the TL4 with four and the TL2 with two. Given the versatility of the range, the right snow lance can always be found for every location.

**Make the most of your lance. Take advantage of all temperatures.**

One of the many innovations proposed by the TL lances resides in particular in the new and compact mechanism that controls the combinations of the rings of the lance: the Smart Distributor. The TL8 model has eight different snowmaking steps, for example, depending on the combination of nozzles open on each ring. The multiple settings allow optimum control of the water throughput at all times, maximizing the snow output in all temperature conditions. The TL range is therefore always a guarantee of optimum snowmaking, both at marginal temperatures and at lower temperatures. Due to its design and position directly under the lance

head, the Smart Distributor also allows the small amount of residual water in the valve to be emptied into the snow jet by means of compressed air when the steps are switched. Thus, every drop of water is converted into snow.

**Robust construction.**

The TL lance heads are mounted on the new and light universal pipe designed by TechnoAlpin. All the cables are inside, preventing a build-up of ice and significantly facilitating installation. The simple and robust design allows the lance to be adjusted horizontally and vertically without limits. The drop height can be adjusted to the conditions. 🚧



# ALPBACH

## AN IMPRESSIVE LINE OF ATTACK

The lances in the new TL range are fitted with high-quality components as standard. The nucleators with ruby inserts and the Smart Distributor are particularly adept at supplying constant snow output and optimum snow quality.

This was also the experience made last winter by **Christian Hausberger** of the Alpbacher Bergbahnen company. After using various prototypes of the new TL8 lance, the snow operations manager is more than convinced of the qualities of this new product.



### What is your impression of the quality of snow produced by the new TL8 lance?

**CHRISTIAN HAUSBERGER:** We had five TL8 lances in use in our ski area last season. After this winter I can say from experience that these TL8 lances have convinced me in terms of snow quality.

### And what about the quantity?

**HAUSBERGER:** I do not know of any comparable model on the market at the moment in terms of the amount of snow produced. This is especially true in the marginal temperature range. I am impressed by the fact that every drop is converted into snow when switching between steps. The hard-wearing ceramic nozzles are advantageous when it comes to maintenance. The spray pattern of the new lance can be adjusted in such a way as to allow coverage of specific lanes with snow, for example, without incurring any great waste or loss.



**AFTER THIS WINTER I CAN SAY FROM EXPERIENCE THAT THESE TL8 LANCES HAVE CONVINCED ME IN TERMS OF SNOW QUALITY.**

**Does this mean that you would definitely recommend the lance?**

**HAUSBERGER:** Definitely. The products made by TechnoAlpin – and especially the TL8 – are excellent in terms of quality. The quality of the snow made by the snow producers is first class. Another positive point I would like to mention is that TechnoAlpin components are totally compatible with each other. This makes our work easier. 🚧

---

**[www.alpbachtal.at](http://www.alpbachtal.at)**



# MADONNA DI CAMPIGLIO

## INCOMPARABLE IN THE MARGINAL TEMPERATURE RANGE

Madonna di Campiglio, the largest ski area in Trentino, has been working for more than a decade with snow producers made by TechnoAlpin. There has been a rolling program of investment in the modernization of the system and in the latest snow producers.

**Germano Alberti**, who is responsible for the snowmaking system in the ski area, therefore also tested the new TL8 snow lance in action last winter.

His conclusion?  
Read on!



must say the TL8 stands out from all previous lance models. The performance and snow quality in this temperature range are truly incomparable, which can certainly be attributed to the new design with the multiple steps.



**THE LANCE PRODUCES SNOW OF THE HIGHEST QUALITY, AND I HAVE BEEN ENTIRELY SATISFIED WITH ITS OUTPUT.**



**You had the opportunity to test the new TL8 lance last winter. What was your experience with it?**

**GERMANO ALBERTI:** I used the TL8 model and I was really very impressed by the snow production. The lance produces snow of the highest quality, and I have been entirely satisfied with its output. Another great leap forward has been made in terms of quality with this new range of products. But I would particularly highlight its performance at marginal temperatures.



**In what way?**

**GERMANO ALBERTI:** I used the lance last winter, especially at temperatures around freezing, and I



**Does this mean that you can imagine using several lances of the TL range in the future?**

**GERMANO ALBERTI:** Absolutely! If I had to decide today which lance model to go for in the future, I would definitely opt for the TL range. Far more precision in the control of snow production is possible, especially in the marginal temperature range as I said, because of the multiple steps on these lances. The new technology also makes the lances much less prone to malfunction. So the TL models would probably be my clear favorite. We have had a very solid relationship with TechnoAlpin for many years and are extremely satisfied as far as innovations are concerned but, above all, with the overall service and support. 🚩

[www.campigliodolomiti.it](http://www.campigliodolomiti.it)



# ZERMATT

## EVEN OUR SNOWMAKING TEAM WAS SURPRISED BY THE PERFORMANCE

The new TL lances always deliver the highest possible snow output thanks to the ingenious design, optimum control and the use of top-quality components. The lances were already being used at Matterhorn Ski Paradise last winter.



**Daniel Imboden**, who is responsible for the snowmaking system at the Zermatt Bergbahnen company, is more than satisfied with the results that have been achieved with the new models.

**What are the main advantages of the new TL models in your opinion, as compared to other snow lances?**

**DANIEL IMBODEN:** The TL4 really stands out in my eyes at marginal temperatures. The performance and output are particularly impressive. Even our snowmaking team was very surprised to see the amount produced by a TL4 after a shift in the marginal temperature range! Another positive point I would like to emphasize is that the work is made

## ZERMATT

easier by the fact that the cables are located inside the lance pipe because it is no longer necessary to be careful with the loose cables when uncovering the base of the lance. The new design also makes it easier to cover the lance with covering mats.

### ➤ **And what are your thoughts on the new capability of the TL lances after having used the various steps with the Smart Distributor?**

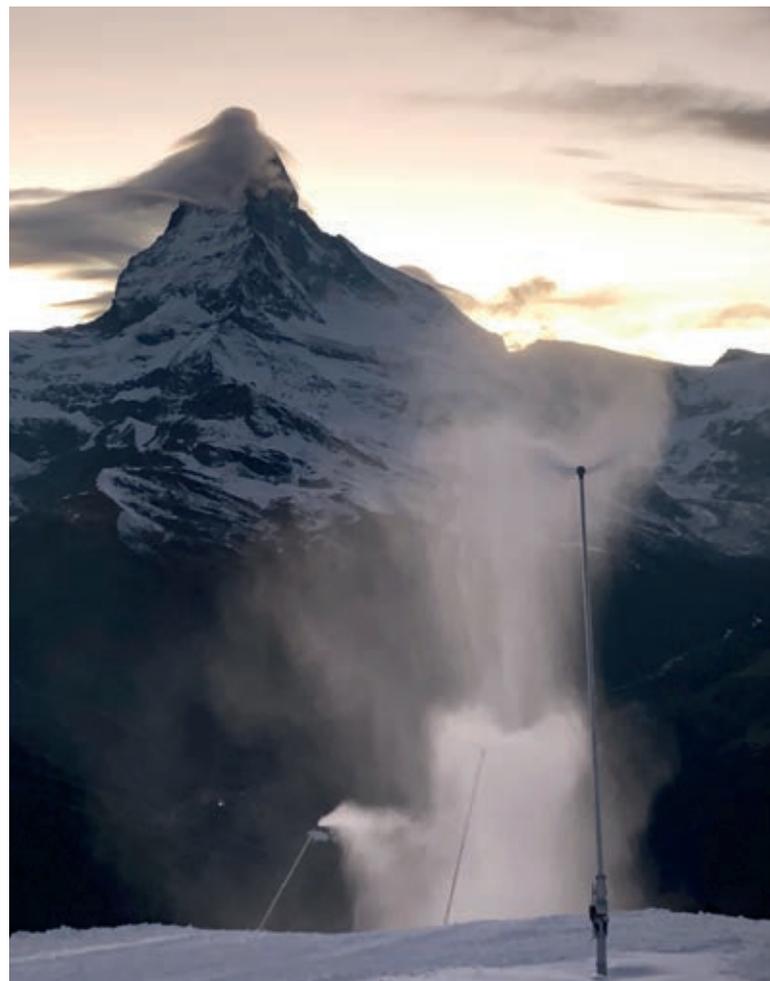
**DANIEL IMBODEN:** The multiple steps enable perfect performance at every possible snowmaking temperature. Even if additional snow coverage is needed while the ski slopes are in use, the required snow quality can be selected with the Smart Distributor and the production process can be monitored without any worries. It is ideal. It is now also possible to do away with the discharge heaters, which has a noticeable effect on energy costs.

### ➤ **So what conclusions an you draw so far from using the lances and TechnoAlpin technology?**

**DANIEL IMBODEN:** We currently have 11 TL4 lances and four TL8 lances in use. These models are reliable and powerful snow producers in any situation. I chose TechnoAlpin because I was impressed by the pit, lance and electrant solutions, but I made my final decision after the series of tests that we did with the TL4. This was a key factor in my decision. The lances could be easily integrated into our control system, and the price-performance ratio was also good. 🏔️



### ➤ **THESE MODELS ARE RELIABLE AND POWERFUL SNOW PRODUCERS IN ANY SITUATION.**



[www.zermatt.ch](http://www.zermatt.ch)

# ATASS<sup>PRO</sup>

# THE GATEWAY TO A NEW DIMENSION IN SNOWMAKING

The key features of good snowmaking software are a wide range of functions for controlling the system, an unrestricted overall view and simple operation. The ATASSpro software combines the best functions of Liberty and ATASSplus in one single system, resulting in unrivaled software based on many years of experience invested in two control systems.

## **The brains behind the snowmaking system.**

The basis for the full automation of the snowmaking operations is the SnowProcess. The entire system can be configured through the control system and there is even closer coordination between the pum-

ping station and the software. This fully automatic solution enables ATASSpro to maintain an overview of the entire system. The snowmaking process is therefore started automatically as soon as the conditions are right. The software continuously monitors the temperature as well as the availability and distribution of resources.

**The optimum view  
for everyone.**

Using ATASSpro is easier than ever. Whether on ultra-wide screens, in multi-screen mode or in the MobileAPP, the completely new interface with the revolutionary navigation concept allows intuitive operation and quick access to the main functions – even without prior knowledge of other snowmaking software. The multi-user mode also provides everyone in the snowmaking team with the option of adapting the view to their own personal preferences and to the requirements for the job in hand. This helps people to focus on the essentials.

**The right decision  
on every occasion.**

ATASSpro delivers large volumes of snowmaking data which serve as a wide-ranging basis for decisions. The improved weather forecast provides the perfect basis for planning and predicting snow production while the analysis tools allow a precise evaluation of the season, making it easy to plan, manage and decide. All of this is also possible on a smartphone with the new and improved MobileAPP as an alternative to the desktop. 📱



# A COMPLETELY NEW USER EXPERIENCE

ATASSpro is a software package that meets the very latest specifications and gives priority to all the functions and apps which are needed and used. These and many other features are now available with the new snowmaking software. It is very easy to move from Liberty and ATASSplus into this new dimension in snowmaking.





24:00

Wet bulb temperature (WBT)      Possible snow

- ❄️ -7.2°
- ❄️ -7.1°
- ❄️ -8.0°
- ❄️ -8.4°

10:57

← GU2004

DETAILS   POSITIONING   PIT   NOTIFIC

**Running**

206: P000206  
Slope D2

Weather

Wet bulb temperature: -8.4 °C

Snowmaking

Water flow: 2.9 l/s

Functional test

# ATASS<sup>PRO</sup>



# ATASS<sup>PRO</sup>

We have asked **Damien Landreau**, Technical Director at TechnoAlpin France and ATASSpro Project Manager, and Product Manager **Patric Lenarduzzi** about the advantages of this new milestone in the history of TechnoAlpin.

## ➤ What is the biggest advantage of ATASSpro from your point of view?

**DAMIEN LANDREAU:** It is quite simple. ATASSpro is the best of the two best control software packages on the market – Liberty and ATASSplus. The software is the perfect tool for the snowmaking team and also for managers. ATASSpro is the brain and the face of modern snowmaking technology.

**PATRIC LENARDUZZI:** It is difficult for me to pick out the biggest advantage of ATASSpro because there are many benefits, like usability, simplicity, stability and the brand-new features, such as the rights management system. The stability of the system is guaranteed by years of experience in modern control software technology. And these are only some of the advantages of ATASSpro.



**How does the new SnowProcess feature help to manage the ski area?**

**DAMIEN LANDREAU:** The SnowProcess function can help optimize snow production in that every cold spell, no matter how short, can be used as a window of opportunity to produce snow. The system also helps when it comes to dealing with malfunctions. If one snow producer should fail, another one will be started up so that no single “snowmaking hour” is lost. This can all be preset by the user of course. The priorities are selected in any given case and the system will then react on the basis of these settings.

**What advantage will customers have if they switch from Liberty or ATASSplus to ATASSpro?**

**DAMIEN LANDREAU:** Liberty customers will have a completely new user experience. The map view with GPS function is one of the most impressive new benefits of changing the system. Other stand-out features include the multi-user mode and the client-server architecture.

**PATRIC LENARDUZZI:** Everyone who switches from an ATASSplus system to ATASSpro will find the functions they are used to. There is not just one advantage to single out as significant. All the functions we provide are important for our users. We took a critical look at the existing features and asked our customers for their opinions at an early stage in the development process and then improved the functions. ATASSpro will combine the familiar with new possibilities.

**What can new customers expect from ATASSpro?**

**PATRIC LENARDUZZI:** ATASSpro offers new customers a total package with all the functions they need. We have the right solution for every ski area, no matter how small or how large it is. Customers who are new to ATASSpro are offered full introductory training when they put the system into operation, and they configure the system together with our employees so that they feel comfortable immediately. The various functions help our customers to continue planning during snowmaking operations and to increase the efficiency of the snowmaking system. There is also an evaluation tool which enables decisions to be made on the basis of data and statistics. 📊







We would like to take this opportunity to extend a special thank you to our partners. The commitment and professionalism they demonstrate is what makes TechnoAlpin a leading Company.

