

# MAGAZINE

S N O W E X P E R T S

*Enjoy.*



energy

efficiency



**energy**  
**efficiency**

high-tech solutions, low energy consumption



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*update available*



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*proves its worth!*



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april 2013

**Dear readers,**

Words like environmental sustainability, efficiency, energy savings and the Green Economy are taking on increasing significance for TechnoAlpin. In this sense, we want to make it our primary objective to ensure the optimal use of resources for our customers.

TechnoAlpin's products are clear testaments to the fact that it is possible to move closer to energy efficiency: thanks to the incredible snow-making capacity of the TF10 fan gun, snow production times are reduced, thus also limiting energy consumption. On the V3 lances, the optimization of nucleators and nozzles with ceramic inserts has improved snow-making capacity and reduced energy consumption.

We have just recently introduced the latest update to the ATASSplus, which focuses on improving water and air management, and monitors energy consumption in order to ensure the efficient use of resources. This monitoring tool prevents the electrical energy value from exceeding the maximum available. A revolution in the snow-making sector. By constantly developing improvements, TechnoAlpin has shown that there is still a wide margin for improvement, and this gives us high hopes for the future.

**TECHNOALPIN®**  
snow experts

We will also be updating you on some interesting new projects throughout the world. These include the extensions to the snow-making systems at Aspen (USA), Vercorin (SUI) and Stara Planina (SRB). NZSki has decided to pursue its partnership with TechnoAlpin. We will also discuss the acquisition of important new customers, such as Ischgl (AUT) and Sörenberg (SUI). Ski resorts in Russia and South Korea have also decided to rely on TechnoAlpin's experience.

2013 is also the year of the World Alpine Ski Championships in Schladming (AUT) and the Nordic Ski Championships at Val di Fiemme (ITA).

**Happy reading!**

Walter Rieder and Erich Gummerer



**walter rieder & erich gummerer**

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**atassplus** 3.2  
our snow is your success



1

# *new update ATASSplus available*

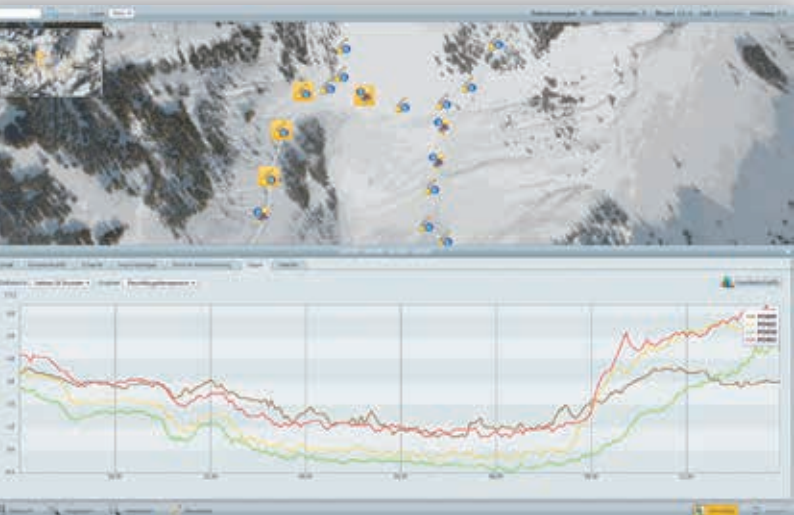
TechnoAlpin is constantly committed to optimizing its product range. The internal ATASS department is also hard at work perfecting the ATASSplus software. The latest system update is available and contains various new features.

For years the TechnoAlpin ATASSplus control software has provided customers with efficient and quick support, **guaranteeing a reliable, easy to manage and maintenance-free platform.**

duced which make navigating the software simpler and more immediate.

The ATASS division works tirelessly with customers in order to constantly improve the software and its performance. Thanks to this cooperation, various improvements have been intro-

**On this subject, in mid-January, the new software update which contains various developments and new features was released:**

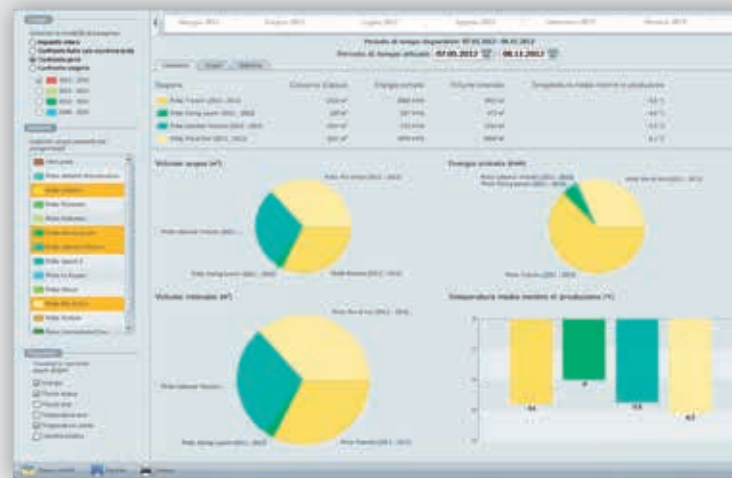
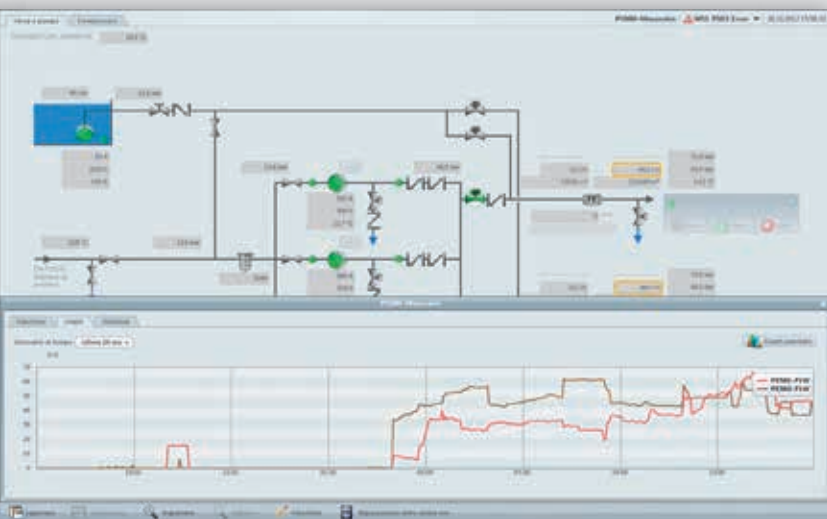




The overview has been visibly improved, letting the user see the pit, generator and pumping plant distribution as well as immediately seeing whether or not they are operational. The new layer based overview shows color-coded temperature values directly on the overview. **The interface has also been updated, combining the basic graphic and statistics functions in a single window,** making navigation even simpler. Other small improve-

ments have also been made including the mini-map, the daily log and the scheduler.

With the system statistics in real time, the new ATASSplus version provides a general summary view of the entire system, which helps the snow-making technician keep water and energy consumption under control at all times. ✓



# TF10



## 2 *TechnoAlpin's big gun proves its worth*

It has now been a year since TechnoAlpin officially launched its largest ever fan gun – the TF10 – on 19<sup>th</sup> of April 2012. The gun came through its first winter with flying colors, in both the northern and southern hemispheres. TechnoAlpin has been listening to the initial feedback from its customers.

The TF10 has been operating on the slopes at Bormio (ITA), which hosts a downhill leg of the Men's World Cup every year. The technical director of Società impianti Bormio, Pasquale Canclini is highly satisfied: "We have always worked closely with TechnoAlpin, to the extent that Bormio even cooperated in developing some of the snow guns that are in full operation today. **The new TF10 has impressed us with its high snow output: in 1 hour, we were able to generate 70 m<sup>3</sup> of snow.** That's a dream come true for us – previously, we would have been happy with 50-55 m<sup>3</sup>!"





The TF10 has been very well received in France, too. At Champ du Feu, resort in the Bas-Thin department in Alsace, the gun confirmed its explosive power in marginal temperatures during the mild December. Management at Le Rouge Gazon are very pleased with the extremely low sound frequency, while the snow quality has been consistently excellent. Last, but not least, energy consumption is impressively low for such a high-performance gun.



"We bought our T60 with the TF10 at Branäs (SWE) and immediately came to appreciate how hard TechnoAlpin has been working to improve its snow gun's functioning and snow production. Even if the TF10 weight is almost like a T60, you don't experience that because the gun is so compact built. In short: it is a larger snow gun, but much simpler to use," explained Lars "KNA" Karlstam, snow-maker at the Swedish resort.



The feedback from managers in Holmenkollen (NOR) was short and sweet: "After just one day of snow production with the TF10, we bought it!"



Some Swiss resorts have also had the opportunity to test the TF10. "The gun is easy to use, with a very practical display," says Dani Meyer of Andermatt Gotthard Sportbahnen AG. Roman Klages, of Bergbahnen Malbun, was especially impressed by the minimal maintenance requirements which, along with the gun's incredible range and moderate sound frequency, make it one of the best on the market.

The snow-making team in Ischgl (AUT) has been using 14 lift-mounted TF10s this year. Their superb range and perfect snow quality at marginal temperatures have fully satisfied managers and snow-makers. Even though it has greater snow-making power, the gun is also impressive because of its low operating noise levels.



The TF10 has received positive feedback not only in Europe, but in the southern hemisphere as well. Tony Kewish, head of snow-making at Mt. Hotham (AUS), had positive comments to make about the snow gun: "The TF10 is a most impressive gun, very quiet, not much icing even in rimy conditions and great quality and volume of production."



## The project *at a glance*

- 14 lift-mounted TF10s
- 8 lift-mounted T40s
- 6x T40s mobile
- 10 km of cast-iron pipes
- ATASSplus

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



*ischgl...*

# 3 new snow-making system

This year has seen Ischgl (AUT) making considerable investments in the upgrading of their snow-making system. For the first time, the Austrian resort has decided to rely on TechnoAlpin's know-how. It didn't take long for the first results to come in: **the resort was able to open on the 23<sup>rd</sup> of November, opening up the 2012/2013 winter season.**

"After testing a variety of snow guns from different companies, we decided to put our trust in TechnoAlpin's experience. The phenomenal power at marginal temperatures, the snow quality and our complex snow-making automation system had quite an influence on our decision. Markus Walser, manager at Silvrettabahn AG explained: "We will be concentrating on development and optimization of the system over the next few years".

Just before the start of the winter season, TechnoAlpin installed an impressive 14x TF10s, one of the most powerful fan guns available on the market.

With an investment of € 2.4 million, Ischgl has been one of TechnoAlpin's most significant projects this year. In addition to the 14x TF10s, also 14x T40s were installed. 22 snow guns were installed on towers/lifts ranging in various heights. Another six guns, on the other hand, were mobile. **A modern and fully automatic system guarantees optimal use of primary resources.**

This also makes it possible to take full advantage of snow-making windows and to adapt snow production according to the predominant conditions. ✂





Stephan tells us: "In order to be able to start working on a project we work on designing each individual system and we base the control device program on them".

"We then go on to test the program on site and do the last settings or its perfect performance on a pumping plant."

After various inspections, the software is finally ready to be placed in operation. Lastly, a brief training course

4

*Stephan Psenner*

*what is up to...*

One of the various divisions that make TechnoAlpin stand out is the PLC (Programmable Logic Controller) programmers division, which depends to the systems-building division.


In the system building division at Bolzano headquarters alone there are 35 employees, 6 of whom are PLC programmers – a young and dynamic group, headed up by Stephan Psenner.

Stephan has been working for TechnoAlpin since September 2005. When he started his career in the company, Stephan was in charge of preparing production material. Thanks to this experience, he was able to see how the machines were assembled, and how the warehouse operated. Stephan moved over to the PLC division in January 2006. In 2011, he became the TechnoAlpin PLC Manager.

Together with his colleagues, Stephan creates pumping plants and valve pit control programs, and he is responsible for interaction with the ATASS control system. This way the software is adapted to the various mechanical and electrical needs. The PLC controller allows automation of the pumping plants.

is carried out with the various ski area managers so that they are able to manage the software in operation.

The busiest months are from May/June until December: TechnoAlpin receives most of the orders from customers during the summer months and these are then worked on until September. The programs ordered must be finished by the end of September, because, from September to December, the programmers are at customers' sites, where they install and start the software that has been ordered. From January to May, on the other hand, the programmers are in our offices, where they provide constant support to customers and develop new software versions, working to improve the control devices and the relevant hardware and components.

In 2012, 256 programs were written, which mainly involved pumping plants (133), extensions to existing plants (90) and adaptations of the system to ATASSplus (33). 



# 5

## *energy efficiency*

It would probably be difficult to think of another sport which is, and always has been, as close to nature as skiing. As a company with a naturally close association with skiing and with the mountains, it is particularly important to us to be sparing in our use of the available resources. That's why TechnoAlpin never stops trying to increase the efficiency of all its components and is constantly looking for ways to make improvements and optimize potential, from the system design, pumping plants and the snow guns right through to the control system. And successfully so, having seen constant improvements in energy efficiency in recent years thanks to intelligent snow-making systems.

Fundamental to energy efficiency in snow-making is the system design. The requirements of any given ski resort must be discussed with the managers there and precisely defined in order to dimension the system correctly. **The aim should be to design**

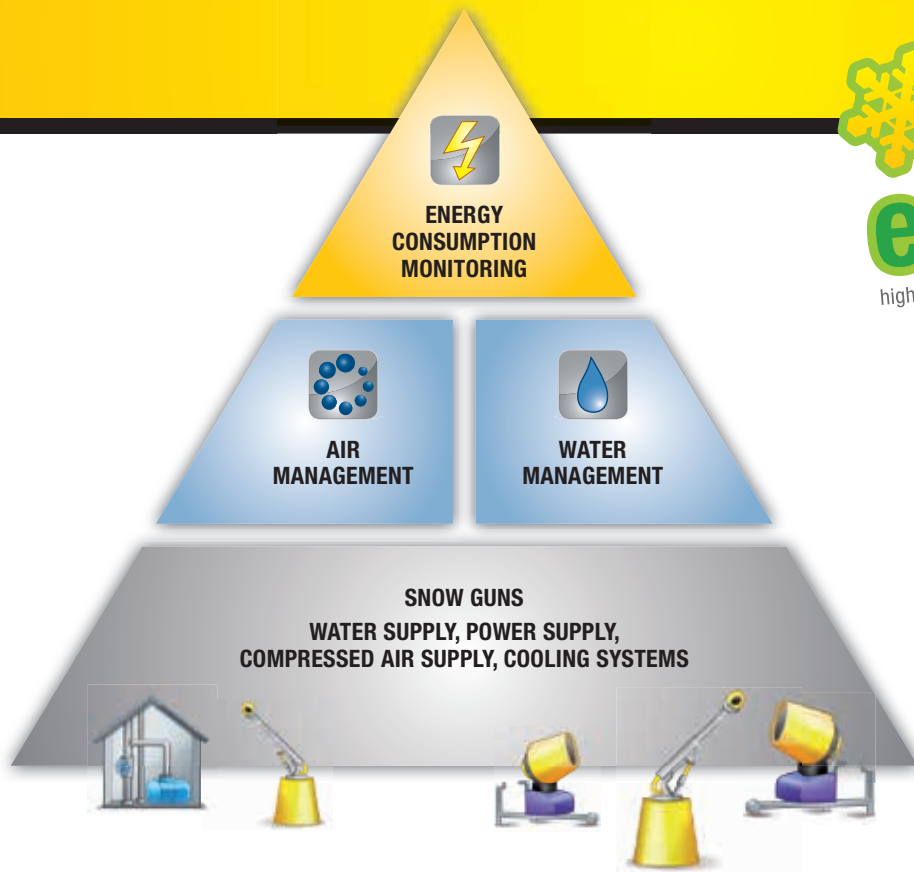
**a snow-making system which can provide basic ground coverage within a short time, using optimum windows of opportunity for snow generation. Another key aspect is the installation of the right snow gun on the right place.** Therefore TechnoAlpin has a broad range of fan guns and lances, enabling various applications and providing scope to factor in the conditions in any given locality.

A fully automatic and intelligent control system is essential for energy-efficient snow generation. TechnoAlpin is setting new standards in this field with its ATASSplus software. The snow operations team can see at a glance from the temperature readings which slopes are the best option for energy-efficient snow generation. The real-time statistics allow them to monitor the water and energy consumption at all times. An energy control function prevents the maximum power limit from being exceeded.



**V3** energy efficiency





**energy efficiency**  
high-tech solutions, low energy consumption

**atassplus**

**Optimum use of resources.**

Another step on the way to improved energy efficiency is the new ATASSplus Snow Manager. This feature provides a simple and straightforward way to manage the use of resources, particularly the energy consumption. **Statistics from previous years are taken as a basis for setting snow targets for the current winter season. Calculations include identifying how much snow is needed at the individual pits.**


Thanks to the ATASSplus Snow Manager, the snow operations team can monitor the targets during the season. The program automatically sends a signal as soon as the snow target is reached. **The Snow Manager works by optimizing snow production and rationalizing the use of resources and energy, making sure that the system does not generate more snow than is needed.**

High-quality components and regular servicing increase the reliability and therefore also the efficiency of the pumping plants. Regular maintenance work should be understood as an essential contributory factor when it comes to guaranteeing optimum performance. The new service contracts are ensuring that the systems are regularly checked by trained personnel.

Every TechnoAlpin pumping plant has its own control unit with the software adapted to individual specifications. The pumping plants are linked with the ATASSplus data transmission sys-

tem, thereby making optimum use of the increasingly shorter windows of opportunity for snow generation. The intelligent ATASSplus system also ensures that optimum use is being made of the pump and compressor capacity. This increases the efficiency of the system with lasting and sustainable effect.

The Development department at TechnoAlpin is always trying to come up with ways to make the snow guns more efficient. The aim is to make more snow with the resources used. The Quadrijet nozzles with ceramic insert on the fan guns guarantee an even spray action for optimum results, generating more snow from the amount of water used. The snow output from the lances has also been continually increased by optimizing the nozzles and nucleators.

**The right snow gun for every requirement has been engineered due to the sheer number of applications.** Fan guns for wide and medium-sized slopes are fitted with an automatic rotation mechanism in order to distribute the snow over a wide area. This also reduces the slope preparation time. Lances are used on narrow, medium-sized slopes which are sheltered from the wind in order to minimize drift. 



## The project *at a glance*

### Cross-country ski stadium

- 2x M12s on tower
- 4 fixed lances
- 5 mobile T40s
- 1 mobile T60
- PS100: 2x 23 l/h 250 m, 90 kW pumps  
1x 45 l/h 76 m, 45 kW pump
- 1 cooling tower
- 7 pits
- 6 electrants
- 1,700 m of aluminum cables

### Ski-jump stadium

- 2 arm-mounted M12s



[www.fiemme2013.com](http://www.fiemme2013.com)

# 6 *a success story*

From 20<sup>th</sup> of February until 3<sup>rd</sup> of March, the Nordic Ski Championships events were hosted for the third time at the cross-country stadium in Tesero and ski-jumps in Predazzo for the forty-ninth World Championships Trentino Fiemme 2013.

Contending for medals during the 21 competitions were 650 athletes from 56 different countries, and as is so often the case with Nordic skiing, some of these countries do not have a long tradition of winter sports. The event was a resounding success: a mix of sports and entertainment that not only pleased fans but also simple onlookers or tourists that happened to be holidaying in Trentino over that period.

As with the 2003 event, TechnoAlpin was once again responsible for ensuring perfect snow cover on the slopes and ski-jumps. In anticipation of the World Championships, the system was upgraded and expanded: a great deal of work was done on existing structures in the Cross Country Stadium, and TechnoAlpin installed two M12 on tower and four fixed lances. Five mobile T40s and one T60 guarantee snow outside the stadium. 1 cooling tower was added to the other 2 already present in the stadium, while the existing pumping plant was expanded. TechnoAlpin also extended the snow-making system in the Ski Jump Stadium

at Predazzo, installing 2 arm-mounted M12s at the exit of the two ski jumps. **Pietro de Godenz, Chairman of the Trentino Fiemme 2013 Executive Committee was more than satisfied with the work done in preparation for the World Championships, as well as during the entire event.**

A point worth mentioning is the eco-friendly organization of these World Championships, which had decided to use wooden PEFC branded infrastructures, the most widely recognized Program for the Endorsement of Forest Certification worldwide. "Green gold", the symbol of this Valley is intended to promote the environment and the region. But it does not end here for Val di Fiemme: university athletes will be competing on the same slopes and ski jumps from 11 to 23 December 2013 during the XXVI Winter World University Games. The Junior World Nordic Ski Championships, on the other hand, will be held in 2014. This represents a new jewel for the Committee chaired by Tiziano Mellarini and Pietro de Godenz. 🚩



# 7

# everyone is a winner

The curtain has fallen on what was arguably the most spectacular World Championship in the history of Alpine Skiing. The effort put in by Schladming, the organizers and all of Austria was repaid in spades: the valley stadium in Planai was consistently filled to capacity with fans and enthusiasts. The image conveyed was one of an Austria united around its champions and the various winners who were crowned at the Planai.

Tourism is extremely important for Austria: the current winter season is expected to break records in terms of arrivals and bookings in the Austrian ski resorts. Sporting events like the Schladming World Championships 2013 add to tourist levels not only during the competition, but throughout the entire skiing season. During the two weeks of the World Championship, 300,000 visitors and more than 3,000 media representatives descended on the small Styrian village. Images of Schladming were broadcast throughout the world, and viewed by about 500 million people, thereby enhancing Austria's image as one of the world's leading Alpine Ski countries.



## The project *at a glance*

- 107 lift-mounted T60s and T40s
- 2 lift-mounted TF10s
- 22 mobile T60s
- 22x A9V centralized air lances
- 1 pumping plant with 165 l/s
- ATASSplus

[www.schladming2013.com](http://www.schladming2013.com)



As far as the competitions went, everything ran like clockwork, with the optimally prepared slopes, despite the fact that the sun only made an appearance on a couple of the days. TechnoAlpin was there to ensure snow conditions on the slopes, and this year provided additional snow guns to reach a total of 131 fan guns and 22 A9V lances with centralized air across the Austrian resort's ski slopes.

More than anything, the most impressive aspect was the total commitment shown by the entire region of Styria, with some 1,000 volunteers arriving from every village to make the World Championships in Austria an unforgettable experience. Looking at the medals table however, it was the United States that came out top, thanks to gold medals won by Ted Ligety and Mikaela Shiffrin. Austria came in second, with Marcel Hirscher who did not disappoint the roughly 50,000 spectators who had come out on the last day of the World Championship to see him win. The most surprising result was France, finishing on the bottom step of the podium. The next World Championship games will be held in Vail (USA) in 2015. 🚀

# 8 *russia*

## *TechnoAlpin systems*

In the 2012/2013 winter season TechnoAlpin finished off some interesting projects in Russia, including the new snow-making systems at Mratkino, Kush-Tau and Toksovo.

With the upcoming 2012/2013 winter season, snow experts at TechnoAlpin worked together on 3 important projects in Russia with their Russian partners at Snowprom, consisting of the Moscovite "Alprojeckt" designer and the "Ri-ural" construction company from Ekaterinburg:



### 8.1 *mratkino*

The Mratkino ski resort located in the Ural Mountains, decided to invest in new infrastructure and a number of improvements.

The resort was ready for the 2012/13 winter season with a new snow-making system and slopes lighted even at night.

9 Premium MMS fan guns will guarantee perfect snow on all 4 slopes. The system includes a pumping plant with water intake consisting of two pumps, with a capacity of 60 l/s and cast iron pipes.

#### The project *at a glance*

- 9x MMS Premium
- Piping material
- Pumping plant with 2 pumps:  
30 l/s, 432 m, 200 kW
- Cast-iron pipes
- 34 hydrants



## The project *at a glance*

- 5x MMS Classic
- Piping material
- Cast-iron pipes
- Container pumping plant with two pumps:  
15 l/s, 365 m, 90 kW



[www.kushtau.ru/complex](http://www.kushtau.ru/complex)

## 8.2 *kush-tau*

Kush-Tau, a ski resort near Sterlitamak in southeastern Russian also decided to invest in TechnoAlpin snow-making systems. **A new container pumping plant, cast iron pipes, piping material and 5x MMS Classic fan guns were installed.**



## 8.3 *toksovo*

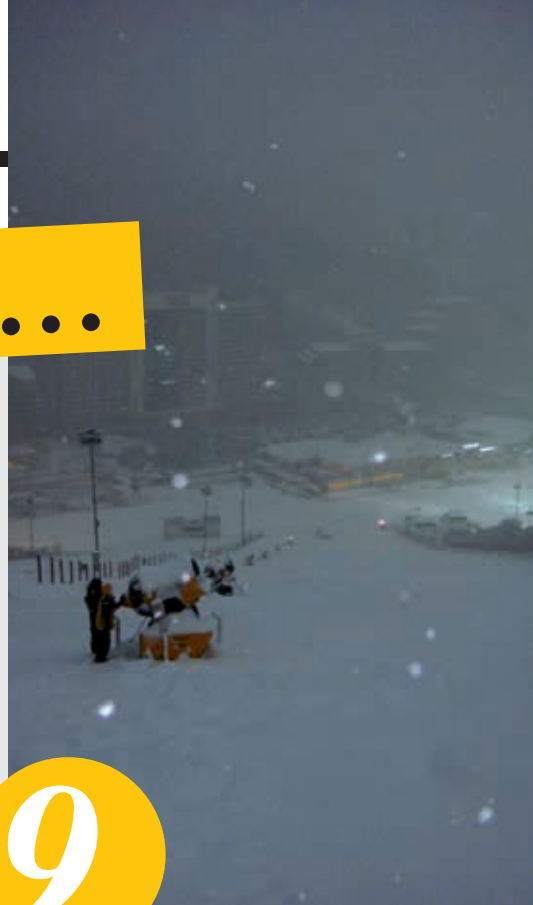
### The project *at a glance*

- 6x MMS Classic
- 5x V3s
- Piping material
- Pumping plant with 2 pumps:  
28 l/s, 320 m, 90 kW

The Toksovo ski resort is located 20 km from St. Petersburg. Specialized in Nordic skiing and equipped with cross-country trails and a ski jump, it has already hosted several rounds of the combined Nordic and cross-country skiing World Cup. **This year they decided to use TechnoAlpin snow-making systems:** in addition to 6x MMS fan guns and 5x V3 lances, piping material and a pumping plant with two pumps were installed.

*south korea ...*

# *relies increasingly on TechnoAlpin*



9

The Daemyung Vivaldi Park Ski World, located in the Gangwon region of South Korea decided to automate the resort's existing snow-making systems. 2x M18s were automated and 7x T40s installed in this context during the summer. **In the future, all snow guns on the resort will become automated.** A demo software version was installed because the customer was still working with the older ATASS version. Automation is becoming an increasingly important issue for South Korea: this way, waste of available resources is avoided, while at the same time increasing the system's efficiency.

The renovation work at the South Korean Welli Hilli Park resort during the summer of 2012 also saw the installation of 15x MTS Classic fan guns by TechnoAlpin. **This was the first time that TechnoAlpin had delivered MTS snow guns with the new stage regulator to Korea,** especially in the ski regions that need to produce snow at marginal temperatures at the start of the season. ✍

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



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





## The project *at a glance*

- 28 manual V3s
- 16 mobile T40s
- 1,200 m of data cables
- ATASSplus in Chinese
- 2 pumping plants with 10 high pressure pumps each

10

# *changbaishan...* *opens its doors*

**The Changbaishan ski resort in China was officially opened on November 30th 2012.**

Located in the province of Jilin, in the mountain range of the same name in the extreme east of Siberia along the northern border between China and North Korea, Changbaishan is one of the TechnoAlpin flagship projects in the Far East. It also probably represents one of the largest and most ambitious projects currently in China: nine ski lifts provide access to about 43 ski slopes, for a total of 30 km. **The opening that took place with much pomp and circumstance was attended by stars from the Chinese sports and entertainment world.**

TechnoAlpin began its installations at the Chinese resort during the summer of 2011.

In addition to the items installed the year before, the summer of 2012 saw another 28 manual V3 lances, 16 mobile T40 fan guns, around 1,200 m of data cables and the implementation of the ATASSplus control software – the first to be installed in China. ✂





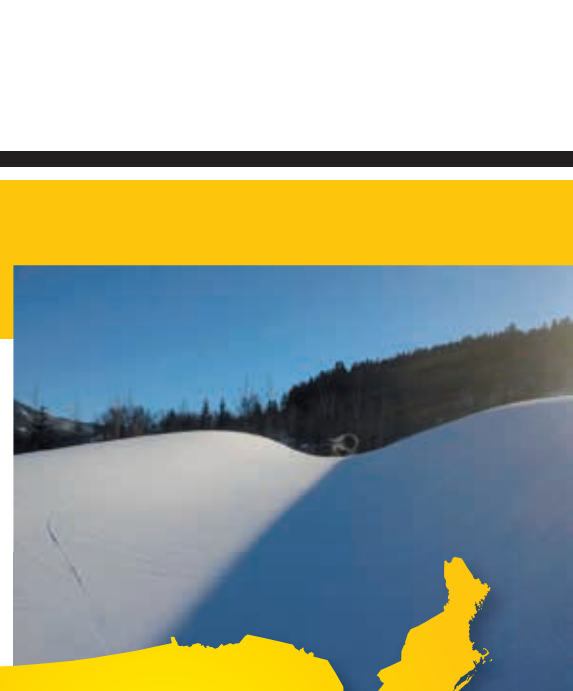
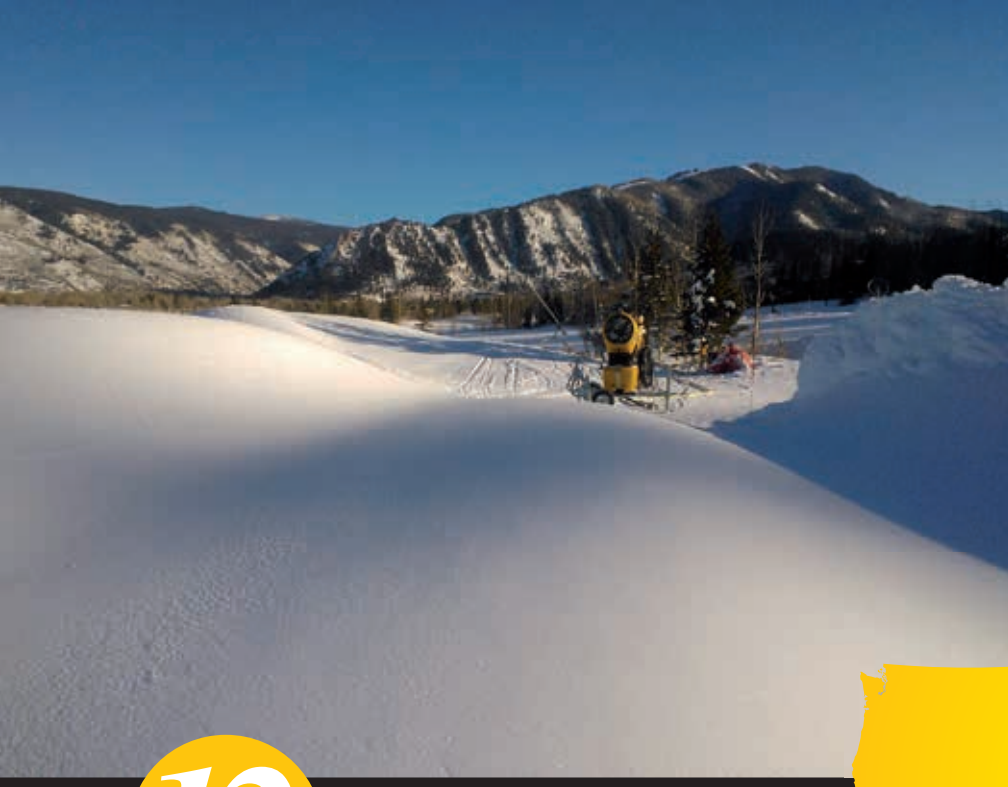
# 11 *montgenèvre* *migrates to ATASSplus*

Montgenèvre, the well-known ski resort providing a southern gateway to the Via Lattea resort, decided to move over to the ATASSplus control software. During the modernization work done in 2012, the ski resort increased its fiber optics and decided to migrate from the old ATASS to the newer ATASSplus software. The installation also included a number of machine rooms (for pumping and compressors). The work to update installations began during the spring of 2012, and by the beginning of the 2012/2013 winter season, TechnoAlpin's control software was already operational. "Revolutionary", according to Pierre Querlioz, the manager of the ski resort. There has been a marked improvement and a great deal of satisfaction. After just a few hours of operation the system's first benefits immediately became apparent: reliability increased, the work improved and data monitoring is much simpler. **Supervising the snow-making is much quicker, and the system is so much simpler to use compared to the previous one.**

The software makes efficient use of available resources, constantly adapting to weather conditions, and making optimal use of water and air, without having to change any parameters. According to Querlioz the snow is almost perfect, with far less effort required from the snow-makers. ✓

[www.montgenevre.vom](http://www.montgenevre.vom)





# 12 *aspen*



The small center of Aspen in the American state of Colorado lies at 2,400 m above sea level and is one of the most exclusive and famous skiing destinations, nestled in the magnificent scenery of the Rocky Mountains. But Aspen is much more than this: it is first and foremost a large-scale resort made up of 4 ski stations, where everyone can find their own terrain for ideal skiing conditions. The stations are Snowmass, Aspen Mountain, Aspen Highland and Buttermilk. The first two peaks are recommended only for expert skiers, while Buttermilk is suitable for beginners and is an excellent location for families.

Considering the 4 ski stations, there is a total of 332 slopes and 513 km, which receive an average of 7 meters of snow per year. **All the resorts are linked by a free shuttle that runs between them to form one of the most famous ski resorts in the world, and a destination which is highly popular among celebrities.**

The resort managers decided to strengthen their relationship with TechnoAlpin in 2012: with 23x T40s and the ATASSplus control software, it will be ideally equipped to ensure perfect snow coverage for Aspen's many slopes. ✓



## The project *at a glance*

- 23 mobile T40s
- ATASSplus

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

## The project *at a glance*

- 5x T40s
- 20x V3s
- 25 pits
- 2 km of data cables
- Pumping plant with frequency drive for 200 kW pump
- 110 kW compressor

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

# 13 *vercorin*

## *TechnoAlpin snow guns for the small village*

The mountain holiday destination of Vercorin is situated at an altitude of 1,300 m in the heart of the Valais, and draws visitors who come to enjoy its pleasant climate in the summer and slopes which offer something for all skill levels during the winter.

In 2012, the ski resort undertook various changes: a new cable car, connecting the village of Vercorin (at 1,300 m above sea level) to Cret du Midi (at 2,332 m above sea level). The snow-making system was also modernized: in fact, TechnoAlpin's fan guns will ensure optimal snow-making from the resort of Cret du Midi through to the Valley of Vercorin (a height difference of roughly 1,000 m).

"The resort in the Vercorin Valley is not at high altitude. This is why the slopes are often not completely snowed over at

the start of the season. This causes considerable problems: customers face the dilemma of trying to decide whether or not to buy a season ski pass. With snow-making, we no longer have this kind of problem", explained Alain Perruchoud, Vice-Chairman of the Cable way Company in Vercorin. "Our cooperation with TechnoAlpin has been excellent, and our expectations have not been disappointed", continued Perruchoud. "The service provided and the very high quality products are what influenced our choice of TechnoAlpin systems."

Equipped with 7 ski-lifts, 35 km of slopes, a snowpark with halfpipes, 12.5 km of slopes for cross-country skiing and sledding, Vercorin provides many different possibilities for winter sport enthusiasts. ✓





The resort is divided into two “mini-resorts”. The village of Sörenberg itself, situated between 1,100 and 1,690 m, provides easy and medium slopes – perfect for families and children. The cable car, two chair lifts and 11 ski lifts carry enthusiasts to the top of the resort.

The Rothorn ski resort, situated between 1,900 and 2,350 m completes the wide range of variety provided by this Swiss resort. Here, the skier can choose his pleasure along the medium-difficulty and difficult slopes. There are free riding slopes and a descent into the valley that is nothing short of spectacular. Roughly 50 km of slopes will be covered thanks to the 43x V3 lances, 5x T40s and 17x M12s. The “Eissee” pumping plant, on the other hand, ensures the water supply for the slopes at Sörenberg. The project also envisages building a compressor plant, 86 pits and 8 km of cast-iron piping. 🚧

# 14 *TechnoAlpin has landed in sörenberg*

**Skiing fun is guaranteed at Sörenberg! In fact, starting in 2013, this Swiss resort will rely on a TechnoAlpin snow-making system.**

**This traditional village at the foot of the Brienzer Rothorn in the Lucerne Canton has much to offer for families and children.**

The phenomenal view overlooking the Brienzer Rothorn which stands at 2,350 m and has the highest peaks in the Canton of Lucerne is absolutely breathtaking: the sparkle of Brienzer Rothorn and Lake Thun, basking under the rays of the winter sun, and in the distance the Eiger, Mönch and Jungfrau peaks together with all the other summits of the Bernese Oberland towering at over 4,000 m.

## **The project** *at a glance*

- 43x V3s lances
- 5x T40s
- 17x M12s
- 8 km of cast-iron piping
- 86 pits
- “Eissee” 25 l/s, 250 kW pumping plant
- 200 kW compressor plant

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



# 15 *stara planina* the hidden beauty of serbia

Stara Planina ( "Old Mountain" in English) is the highest mountain in eastern Serbia: it is an elevated mountain mass which forms a natural border with Bulgaria. The marvelous beauty and pristine natural environment make the Stara Planina the most beautiful mountain in the eastern section of Serbia, and one of the most sought-after tourist destinations. It represents a natural treasure of significant value and is located in a protected nature reserve.

The climate here guarantees plentiful snowfall for almost five months out of the year, and the altitude between 1,100 and 1,900 meters helps create long Alpine ski runs that have helped to make Stara Planina one of the largest and most important skiing centers in Serbia.

The ski resort is part of the "Ski Resorts of Serbia", which in-

cludes 3 destinations in all: Kopaonik, Stara Planina and Zlatibor. Ski Resorts of Serbia is the main ski resorts administrator in Serbia.

In 2012, Stara Planina decided to expand its resort and the TechnoAlpin snow-making systems which had been built in 2009.





## The project *at a glance*

- 4 mobile T40s with E-Motors
- 16x T60s on 4.5 m lifts
- 1x T10 on 4.5 m lift
- 18x V3s with centralized air
- “PS300” pumping plant with 2x submersed 45 l/s, 76 m, 45 kW pumps
- “PS400” pumping plant with 2x high pressure 40 l/s, 510 m, 315 kW pumps
- 23.70 m<sup>3</sup>/min, 8 bar, 132 kW compressor
- 9.8 km of cast-iron piping
- ATASSplus

[www.staraplanina.eu](http://www.staraplanina.eu)

Another two pumping plants were added to the two existing ones: the PS300 and PS400. Another 21 fan guns were delivered, along with 18 lances, which were added to the 8 guns already delivered in 2009. Further developments are also

planned at this ski resort. With the building of new chair lifts, slopes, hotel accommodations and other infrastructures, Stara Planina will soon become one of the most important ski resorts in Serbia. ✈





## *TechnoAlpin & NZSki*

16

# *a long partnership*

NZSki operates three of the largest ski resorts in New Zealand all located in the South Island. Two of them near Queenstown, Coronet Peak and The Remarkables and one near Christchurch, Mt Hutt. The company purchased these resorts back in 2002 from Air New Zealand. **Duncan Smith, the Managing Director of NZSki at that time said, "The company partners shared a common belief in the outstanding potential of Coronet Peak, The Remarkables and Mt Hutt in the New Zealand tourism industry"**

Over the years extensive capital investments have upgraded the infrastructure in the resorts. NZSki has invested heavily in its staff, snowmaking, grooming, transport and rental equipment to ensure that the guests experience is the best it can possibly

be and get NZSki one step closer to its purpose "to lead the world in Snowsport experiences".

The CEO of NZSki, James Coddington says this belief holds true today and the entirely locally owned company continues to demonstrate its commitment to timely developments that deliver long term benefits to customers, industry partners and the resort communities of Queenstown and Methven.

**The partnership between NZSki and TechnoAlpin started back in 2003 with the first projects at Coronet Peak.**

Since this time TechnoAlpin has upgraded the snowmaking installations on all three ski resorts.



Coronet Peak, is the most popular NZSki resort with up to date infrastructure and spectacular roller-coaster terrain. Located 20 min away from Queenstown, it's easy to access either by bus or car. This was the first ski resort to open in New Zealand in 1947 with just one slope till 1994 when the second chair lift was installed. Today 215 snow guns guarantee complete snow-making coverage with high quality snow. **From the 2013 winter season the newest control software ATASSplus will guarantee easy and efficient control of the whole snowmaking infrastructure.** With the investment in snowmaking infrastructure, Coronet Peak has significantly extended its season from on average 60 days to 110 days.

The Remarkables is located directly across the valley from Coronet Peak, on the other side of Queenstown. This ski area is a true alpine experience offering a spectacular 220 ha of slopes. In total there are 40 TechnoAlpin snow guns that prepare the slopes here in a winter paradise.

Mt Hutt is located at Methven near Christchurch and is the leading ski area in the Canterbury region. It gets some of the lightest, driest powder and is one of the ski areas in the Southern Hemisphere with the longest season (early June until mid October) Located at 2086 m Mt Hutt offers 368 hectares of skiable terrain with a vertical drop of 683 m ! In total 64 lances guarantee the snow coverage in this area.

## Future partnership

After fully developing the snowmaking system at Coronet Peak over the last few years, NZSki will focus their attention of new snowmaking investments closer to The Remarkables and Mt Hutt. After 10 years of partnership with TA, NZSki decided to investigate the snowmaking equipment of different suppliers. This was to ensure they have the right partner for the future extensions which can fully satisfy NZSki needs, in terms of quality, service and competitive pricing. This investigation contained several performance tests of snowmaking equipment over a long period and different conditions at the Remarkables ski area. In addition to the operational test's of the snow guns, NZSki also looked in detail at the price, service, quality of design, manufacture, product range, reliability and efficiency of equipment, back-up, warranty and the input of the snowmakers on site. **Thanks to this big comparison, NZSki had a confirmation of having the right snowmaking partner and decided to continue the successful partnership with TechnoAlpin also for the future.**

"We are very proud of our partnership with TechnoAlpin and we look forward to many more years of cooperation and successful snowmaking", explained James Codrington (CEO of NZSki). NZSki GM added:"The quality of product, range of equipment and excellent technical support make TechnoAlpin our snow making supplier of choice." 🚧

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



## DID YOU KNOW...

**1** *that* TechnoAlpin also attended Alpitem China, the Chinese international Alpine and winter technology fair? In fact, the fair was held from 27 February through 2 March 2013, at the same time as ISPO BEIJING. In the heart of the new Olympic village in Beijing, specialized buyers had the opportunity to view a complete range of products and services for winter ski resorts, spread out over a floor space of more than 30,000 m<sup>2</sup>. For TechnoAlpin, Alpitem China provides an ideal platform for getting to know the market and introducing itself to customers in the Far East.



## 17 ...all about TechnoAlpin!



**2** *that* in mid-December, TechnoAlpin's employees in production celebrated the 1,000<sup>th</sup> fan gun manufactured in 2012? The recipient of the plaque with the number 1,000 was the TechnoAlpin "baby", MMS, purchased from the Polish ski resort of Karpatka Ski Panorama. This is the sixth time in TechnoAlpin history that the 1,000 threshold has been crossed in terms of fan guns produced.

**3** *that* TechnoAlpin, together with its partner Melchers Techexport in China has opened a service center in Beijing? The service center is in an excellent location, not far from Beijing International Airport. The center is spread out over 500 m<sup>2</sup> and has a repair room, a product warehouse and a spare parts warehouse, and a hall for holding training courses.



Thank you!

**18** partners

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.



