

# WIR

The Customer Magazine of the Doppelmayr/Garaventa Group Issue 1/2016

 Doppelmayr®

  
GARAVENTA

41<sup>st</sup> Year/No. 198

## Customized service

On site worldwide, flexible and professional – that's how customers describe the Doppelmayr Group's customer support.

## New ropeway in six weeks

Despite a fire in the bottom station, the Bergkastel lift in Nauders opened on time for the start of the season.

## 3S lift masters the curve

Doppelmayr revolutionizes 3S technology yet again with the curve solution for Mayrhofen.



# 6



# 12



## Gently gliding around the curve with the 3S lift

Doppelmayr developed an innovation to address the special requirements in Mayrhofen: Penken is the first 3S lift to feature a curved alignment.

## Customer support tailored to requirements

Every customer who opts for a Doppelmayr ropeway is investing in an attractive installation with top operational safety and availability. And to ensure it stays that way over the long term, Doppelmayr offers a wide range of well-conceived customer services.

# 14



## Top achievement in Nauders

Shortly before the start of the 2015 season, the bottom station of the Bergkastel lift, which was undergoing refurbishment, caught fire. In record time, Doppelmayr delivered the entire ropeway equipment and collaborated with many other partners to enable winter operation to go ahead as planned.



11



### World first in Mayrhofen

With its innovative 3S technology, the new Penken lift cannot fail to impress and is an integral part of the municipality's vision for mobility.

24



### Doppelmayr Italia

Three pioneers of ropeway construction in South Tyrol agree a merger – and make ropeway history in the process.

## Ropeway highlights worldwide



We look back on another successful business year. Doppelmayr once again worked with customers around the globe to build spectacular new ropeways featuring innovations and ropeway engineering at the highest level. These installations all testify to the great performance of our products and our employees.

The fiscal year 2014/15 again clearly showed that ropeways for winter tourism are Doppelmayr's most important market. The Pardatschgrat 3S in Ischgl was a case in point. Doppelmayr implemented many new features and innovative solutions as well as the novel carriage wheel generator on this 3S lift.

December 2015 saw the start-up of another 3S installation with a world first. For Mayrhofen, our design engineers developed a new rope guiding technology which uses a special tower construction and enables the cabins on the Penken 3S to travel along a curve. Events in Nauders called for exceptional efforts on the part of everyone involved. The extraordinary dedication and solidarity shown by all employees and helpers made it possible to rebuild an entire bottom station along with the ropeway machinery within a short space of time. They deserve absolute respect and top praise for this achievement.

We also completed attractive ropeway installations in the international market, such as at Sugar Mountain Resort in collaboration with Vail Resorts in the USA and the new Funifor in Italy. We can again look forward to some very exciting projects during the year ahead. Our teams deployed worldwide are currently working on many more ropeway highlights of the Doppelmayr Group in places that include Vietnam, Macao, Venezuela, Bolivia and, of course, the Alps.

The trust placed in the capabilities of the Group by customers around the globe represents a duty, a challenge and an incentive to continue to develop market-oriented technical innovations, to offer top logistical performance and to build simply the best ropeways in the world.

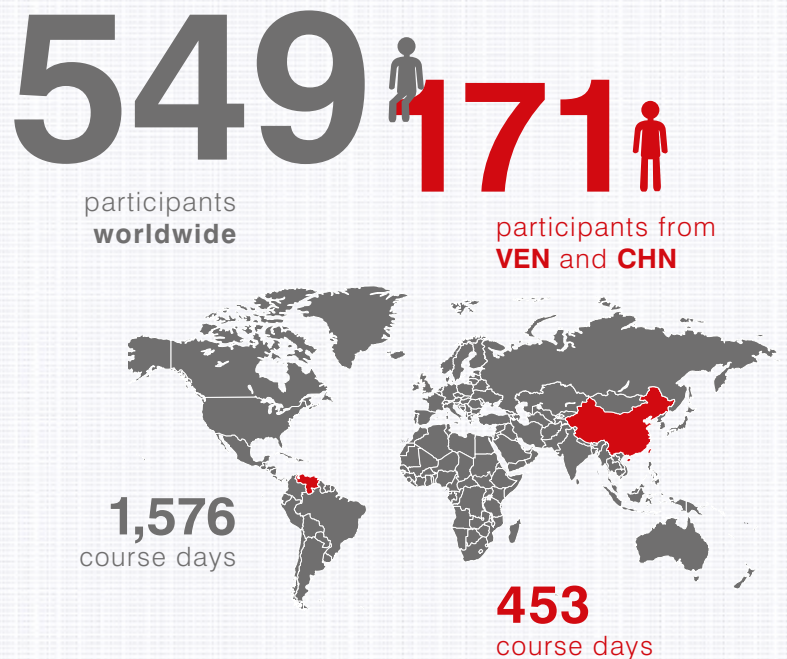
Michael Doppelmayr  
CEO



## Record year for practice-oriented training in 2015




Every year, Doppelmayr offers customers an extensive program of training options. Practice-oriented seminars are provided by engineers and technicians from a wide range of specialist areas as well as external experts from supplier companies. 2015 was a record year, with 549 participants attending over 1,570 course days. At Doppelmayr sites in China and Venezuela, another 171 participants attended various courses involving a total of 453 course days. Instructors always ensure that theoretical content is illustrated by visits to ropeway installations in the vicinity. | 



## New office complex begins to take shape

It will soon be time to pack boxes: Doppelmayr Wolfurt is expected to be moving into its new company headquarter at the end of 2016. Work on the new complex, which comprises nine blocks, is making rapid progress. The shell construction has already been completed on blocks C, D and E, with the other blocks scheduled to follow in March. The interior construction and installation of the building services have been ongoing

since the beginning of the year. The basement covers around 7,000 m<sup>2</sup> and offers ample space for storage facilities and for parking cars, motorbikes and bicycles; the ground floor will accommodate conference and meeting rooms as well presentation areas. The offices will be located on the five upper floors and offer ultra-modern workplaces for some 625 employees. | 





## Doppelmayr increases headcount and consolidates market leadership


The Doppelmayr Group was able to further expand its leadership of the global market in the fiscal year 2014/2015. Despite a moderate decrease in sales revenues, which was attributable to accounting factors, performance over the past year was generally positive. A series of innovations wowed operating companies and made the ropeway industry sit up and take notice. Many exciting projects were successfully completed – Doppelmayr ropeways built as a result of important, visionary infrastructure decisions ensure satisfied passengers around the globe.

### Even greater drive

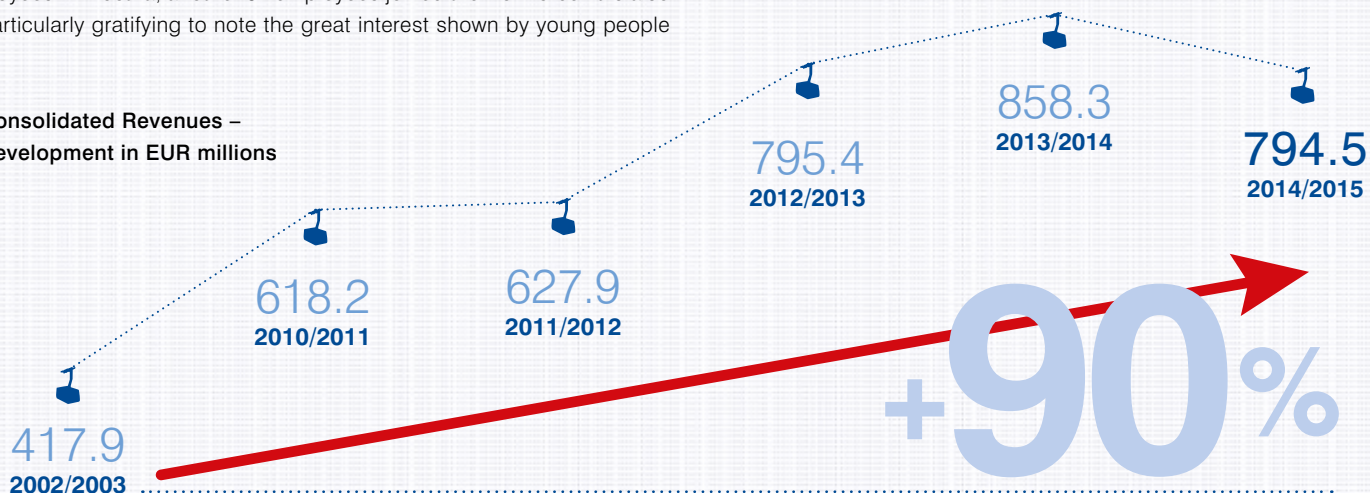
The completion of major projects, which led to record revenues in fiscal 2013/2014, also had a noticeable impact within the Doppelmayr Group. Worldwide, Doppelmayr increased headcount from 2,452 to 2,546 employees. In Austria, another 64 employees joined the workforce. It is also particularly gratifying to note the great interest shown by young people

in a career with the top ropeway supplier. The fall saw 22 new apprentices begin their training, taking the total number of youngsters currently undertaking specialist training at the Wolfurt site to 92.

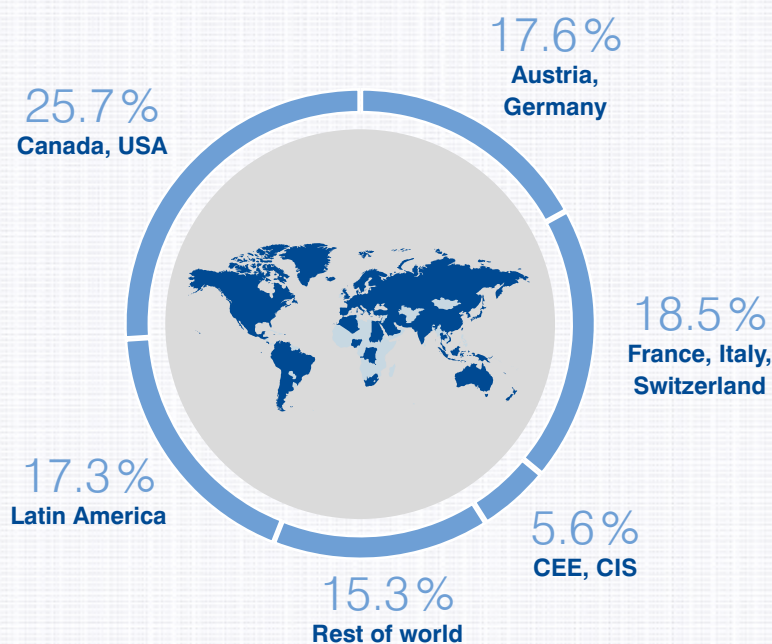
### Winter tourism – the key market

Fiscal 2014/15 once again clearly showed that ropeways for winter tourism are Doppelmayr's most important market and are set to remain so in the future. In spite of uncertain macroeconomic conditions, Doppelmayr expects to see a stable development in sales revenues and a satisfactory operating result for fiscal 2015/2016. 

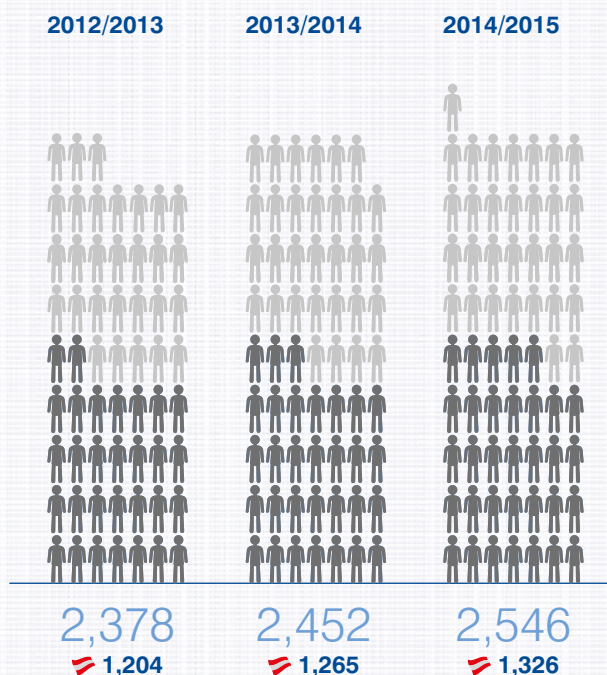
Consolidated Revenues –  
Development in EUR millions



Revenues by Region in 2014/2015



Headcount – Development Worldwide / Austria











Doppelmayr currently looks after customers in **89 different countries**. The high quality of customer support is standard around the globe.



Specialists provide a wide spectrum of customer services covering all areas at a total of **33 centers**.



An optimally equipped **container for training purposes** is now available as a mobile solution.

# Customized service

On site worldwide, flexible and professional – that's how customers describe the Doppelmayr Group's customer support.

Every customer who opts for a Doppelmayr ropeway is investing in an attractive installation with top operational safety and availability. And to ensure it stays that way over the long term, Doppelmayr offers a wide range of well-conceived customer services. Doppelmayr's expertise – whether it's for summer or winter tourism, or for the urban environment – not only draws on a solid foundation that is globally unique. Customers also have straightforward access to the wide range of services anywhere in the world.



Whether it's inspection work on carriers, sheave assemblies or bullwheel bearings, the customer support team is always there to help every customer.



#### **Preventing problems means timing services prudently**

Doppelmayr's customer support strategy is proactive. A competent customer support team operates strategically, rather than only when called upon to act. Service work is geared to a long service life of the ropeway, and is consequently planned in advance and performed by specialists on a regular basis. This not only ensures the perfect functioning of the installation but also saves costs in the long run. Responsibility towards the customer begins before the ropeway is purchased because professional advice is crucial in the early phase of the proceedings. Doppelmayr also provides advice on all questions that arise during and after construction, irrespective of whether they relate to financial, technical or organizational matters.

#### **Maximum availability and operational safety**

The safety of passengers and operating crew as well as the smooth running of the ropeway installation is always the key focus of Doppelmayr customer support. Specialized services are available for the areas of mechanics, hydraulics and drive technology. For individual or more complex requirements, the service

specialists develop solutions that are tailored to the customer's needs. Sophisticated logistics enable Doppelmayr to provide minimum response times when it comes to supplying spare parts. The technical support team also provides solid assistance and works very swiftly to ensure the smooth running of the customer's ropeway operations.

#### **The quality of the service is crucial for safety and comfort**

Personnel training is a top priority for Doppelmayr. That starts with apprentices and continues with the ongoing further training of all employees. The know-how of our customer support staff is always cutting edge. They have in-depth knowledge of the latest as well as proven inspection and maintenance methods. The high quality of Doppelmayr's support sets the global standard.

#### **Ropeway technology training for lift operators**

Safety, high availability, top comfort and a long service life are the hallmarks of Doppelmayr ropeways. When it comes to making sure it stays that way, the people who work on the ropeway on a daily basis need to be entirely

familiarized with the technology and have detailed knowledge of all procedures for repair, maintenance and operation. For this reason, Doppelmayr offers a comprehensive training program, which is practice-oriented and covers all areas of ropeway technology. In view of the fact that our training courses were fully booked in 2015, it is advisable to register well in advance to be sure of a place. As a mobile solution for training events, an optimally equipped container has recently been introduced, which is now being used for the first time in Sochi and will subsequently be deployed throughout Russia. This will provide Doppelmayr offices around the globe with a fast and simple solution when it comes to organizing practice-oriented training facilities.

#### **Ropeway technicians on call**

Customers wanting to keep their personnel requirements lean and simplify their budget planning also have the option of outsourcing ropeway maintenance tasks to Doppelmayr, thus ensuring that the work is performed on a targeted basis by external specialists. This approach provides the assurance that the service technicians are always at the cutting edge of technology and know the installations inside out.





Eager to find out more about theory and practice: customer personnel taking part in training at Wolfurt.

#### Doppelmayr's international customer support: utilizing worldwide service expertise

Doppelmayr currently looks after customers in 89 different countries – a number that is set to increase. Specialists covering all areas at a total of 33 centers provide competent support on site. Service technicians from our headquarter complete the close-knit customer support network. Doppelmayr attaches great importance to the exchange of know-how between all external customer support centers to ensure that customers around the globe can rely on the same high quality of service and maintenance. The proven ropeway know-how spanning generations is passed on in compact form through the specialist training provided for the staff who work at these centers as well as for the service technicians. 1

#### Customer support services

- Comprehensive assistance: advice on technical and commercial issues
- Support areas: electrical and electronic engineering, hydraulics, drive technology, line and station equipment, grips, carriers
- Inspection, troubleshooting and maintenance in accordance with applicable standards and codes
- Preventive service
- Technical support around the clock
- Remote maintenance possible on request; enables identification and elimination of problems
- Development of specialized ropeway tools
- Service for all Doppelmayr equipment components
- Minimum response times worldwide thanks to sophisticated spare parts logistics

#### Ropeway technology courses

- Extensive training program covering all areas of ropeway technology
- Instructors are engineers and technicians from the Doppelmayr Group and/or partner companies
- Practice-oriented approach to acquiring process-related and technical know-how
- Courses in Wolfurt or on site anywhere in the world and in the local language possible
- Mobile training container
- Customized training on request

#### Training container



#### How to contact customer support

Request our new training brochure:

[training@doppelmayr.com](mailto:training@doppelmayr.com)

Our complete offer and further information can be found at [service.doppelmayr.com](http://service.doppelmayr.com)



# Even an outstanding overall offer needs flagship projects

WIR spoke with Michael Rothleitner, managing director of Mayrhofner Bergbahnen AG.



**WIR.** This year, Mayrhofen will be showcasing another 3S innovation from Doppelmayr. The brand-new Penken lift is the first 3S installation to feature a curved alignment. What made you choose Doppelmayr as your partner on this project?

**Rothleitner:** The curved alignment was actually one of the key issues during the course of planning and implementing the new lift. We had major concerns – to the extent that we spent years negotiating with land owners to see if we could avoid it altogether. At the same time, we conducted intense discussions with all well-known ropeway suppliers to investigate the possibility of implementing a curved alignment.

The aspiration of wowing our guests – in other words, exceeding their expectations – is an inherent part of our strategic alignment. That's also something we experienced with Doppelmayr. Their engineers took our concerns regarding the curve and our requirements in terms of ride comfort seriously. And it was fascinating to see how they worked with us to develop solutions. It might sound exaggerated, but the development work surrounding Tower 1 (Astegg) created huge fascination and excitement.

We've never had any doubts about our long-standing ropeway partner, Doppelmayr.

**WIR.** The 3S up to the Penken includes custom solutions for both the loading area and the carrier parking facility. What were the reasons behind them?

**Rothleitner:** Up to now, the carriers have been parked in the bottom station. In view of the limited space available in the center of the village, it would no longer have been commercially acceptable to deprive guests and service providers of this valuable space. We faced the same situation at the top station. That was the background to the decision to house the parking for our wonderful new cabins on the first floor of the top station. The only solution to meet all these requirements was a vertical conveyor – it's ideal when you need a compact means of accommodating all the necessary facilities under one roof.

The second custom solution was the cabin loading area, which we wanted to make as stress-free and comfortable as possible for visitors. A key consideration was to avoid the situation of guests having to jostle with other passengers waiting on the platform for the next

cabin. The idea was to have a zone between the turnstiles and the actual boarding area where we could “slow the flow”, so to speak. Doppelmayr and Skidata worked with us to successively develop a new access gate that would meet all these requirements. We believe that this innovation will also set an example for other aerial ropeways in the future.

**WIR.** As a ski resort, Mayrhofen faces tough competition. In your view, how important are innovations that set the tone when it comes to promoting the attractiveness of a ski resort to guests?

**Rothleitner:** If you want to convince guests of a ski resort's attractiveness, you have to have a coherent overall concept. That means the entire service chain, which goes beyond the services provided by the lift operating company. The interaction between rental property owners, ski schools, ski hires, hospitality, etc. also plays a significant role. In our case, we have to get the message across that Mayrhofen is a summer vacation paradise as well as an attractive location for winter sports. It goes without saying that the means of transport are also an important differentiating factor. Innovative ropeway technology also acts as an indicator that guests can expect the overall offer of the operators to be innovative.

*“The new Penken 3S lift will certainly enable us to attract attention, and in turn to direct some of that attention toward the high value of our overall offer for guests.”*

In this context, we look forward to a continuation of our ongoing collaboration with Doppelmayr. There's another innovation in the pipeline for the Penken S3 lift aimed at the summer season. That's currently the focus of a joint development effort. | 1





**We are 3S**

## World first in Mayrhofen

With its innovative 3S technology, the new Penken lift cannot fail to impress and is an integral part of the municipality's vision for mobility.

Mayrhofner Bergbahnen AG

A world first from Doppelmayr has been operating in Mayrhofen/Tyrol since December 2015. The Penken lift is a specially developed 3S installation with an unusual rope guidance configuration – and an integral part of a modern, comprehensive transport concept heralding a new era of mobility for base and mountain areas in Mayrhofen. The new lift replaces a bicable installation and is to operate all year round. With its curve solution, it sets an entirely new benchmark in 3S technology.

### Proven technology and partnership were the deciding factors

There were several reasons for choosing Doppelmayr. A major factor was the Group's technology leadership in the area of tricable systems. In addition to the innovative curve solution, Doppelmayr's proven recovery con-

cept has been used on the Penken lift. This ensures that all cabins can be returned to the station in an evacuation scenario, doing away with the need for a rescue ropeway. The "easy boarding" concept, based on an idea of the operating company Serfauser Bergbahnen, who were the first to use it, has been further developed in collaboration with Skidata and Mayrhofner Bergbahnen, and now offers guests special gates for comfortable, hassle-free access to the cabins. Safety was an essential focus of the implementation, particularly for the younger guests. For this reason, ski schools benefit from a separate access and boarding area – a key asset when carrying children.

The trust between Mayrhofner Bergbahnen and Doppelmayr derives from a successful business relationship spanning decades. Joint projects have included the Ahorn aerial tramway with Austria's biggest cabin and the Penken combination lift, which at 3,900 PPH offers the highest capacity worldwide for an installation of this kind.

### Customized throughout – from the carrier parking facility to the corporate design of the cabins


Individually tailored design was also the order of the day in the stations. To ensure that the conveniently accessible ground floor of the top station is entirely devoted to the guests, a vertical conveyor brings the spacious cab-

ins up to the parking facility on the next floor. The trip on the extremely wind-resistant tricable gondola up to the Penken takes just over eight minutes. Other features which ensure top comfort for passengers during the ride include well-upholstered seats and WLAN in the corporate design cabins. | [1](#)



### 30-TGD Penken Lift

Owner	<b>Mayrhofner Bergbahnen AG</b>
Location	<b>Mayrhofen, Tyrol (AUT)</b>
Vertical rise	<b>1,135 m</b>
Speed	<b>7.5 m/s</b>
Towers	<b>3</b>
Capacity	<b>max. 3,840 PPH</b>
Carriers	<b>33 cabins</b>
Construction	<b>April through December 2015</b>
Opened	<b>December 19, 2015</b>

 German language video on the future for Mayrhofen



### Benefits of the 3S Penkenbahn

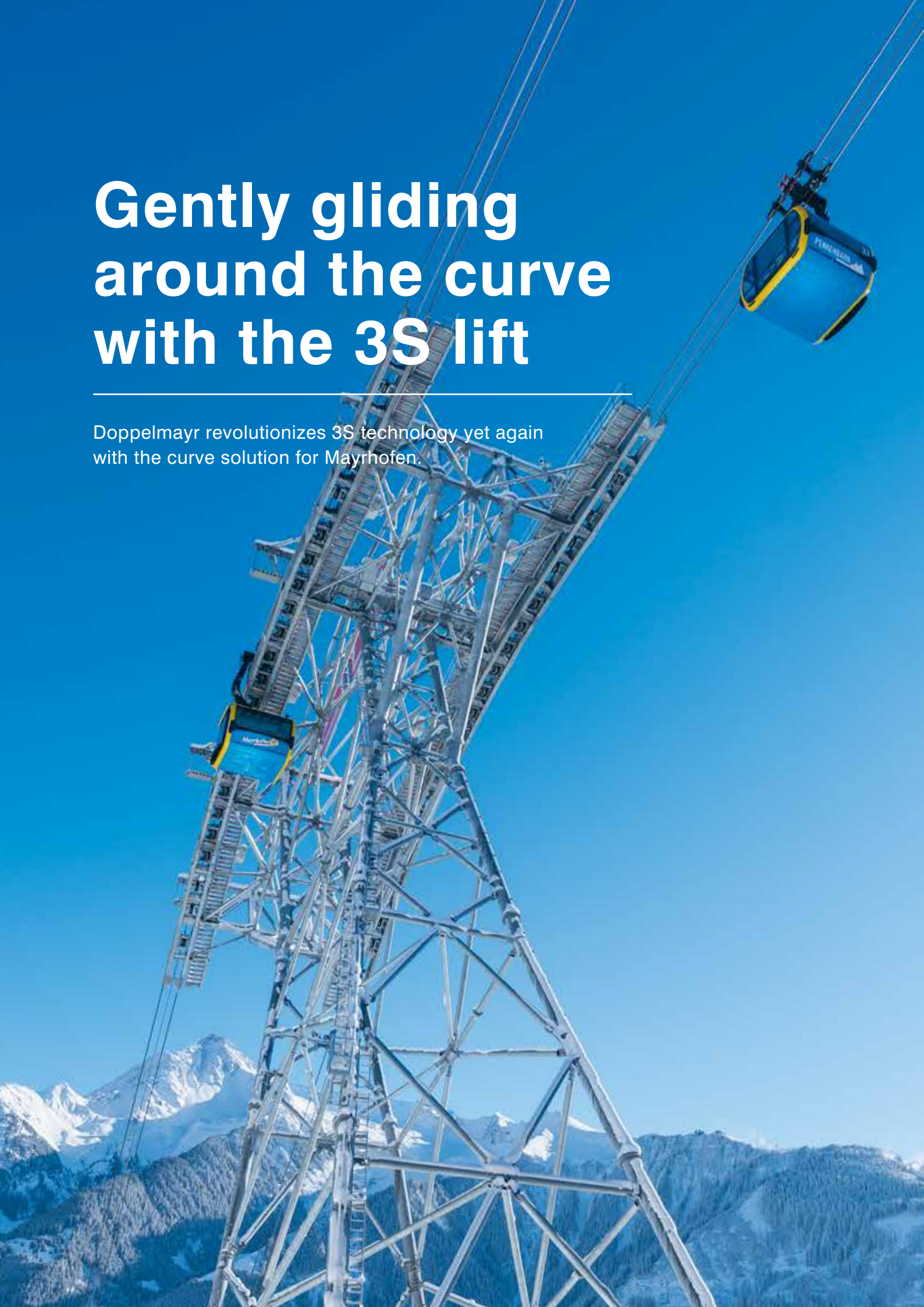
- Radically reduced waiting times
- Separate boarding for ski school children
- Trip time only 8.2 minutes
- Very comfortable seats
- Twice the capacity of the predecessor lift
- Generously dimensioned ski/board hire and storage facilities in the top and bottom stations
- Cabins equipped with WLAN



# Gently gliding around the curve with the 3S lift

---

Doppelmayr revolutionizes 3S technology yet again  
with the curve solution for Mayrhofen.







**L**ast year, Bergbahnen Mayrhofen was confronted with the challenge of replacing an old bicable lift while retaining the original alignment – which included a curve. Doppelmayr responded with the development of a 3S innovation which is awe-inspiring. An impressive tower construction and a new rope guidance configuration enable the Doppelmayr tricable gondola to ride along a curve for the first time.

For Mayrhofen, the time had come to replace the bicable lift up to the Penken with a new, improved installation. The station infrastructure and the lift alignment had to be retained, requirements which meant an exciting task for Doppelmayr's ropeway engineers because the special feature of the Penken lift was its curved alignment over a tower – which negatively impacted ride comfort for passengers. Doppelmayr relished the challenge and succeeded in coming up with an innovation. The new Penken lift is designed as a 3S and is the first of its kind to travel along a curved route.

#### What actually happens when the cabin travels around the curve?

As basic research for the new curve solution in Mayrhofen, the ropeway experts carried out in-depth calculations and studies. In development, Doppelmayr works with the best cutting-edge engineering software. "In order to be able to simulate travel over the curve saddle on the Penken 3S and the special haul rope guidance configuration, we first had to further

develop the simulation program for this specific purpose and add our own programming elements," explains Peter Luger, Doppelmayr's 3S system manager. The professionals in Wolfurt built their own curve test rig where they could perform extensive tests on the material and functions, and develop the solution to technological maturity. The design has to cope with an axis angle of 6.5°. The intensive test phase took a total of three months. As a result, no further improvements were required during the test running of the lift.

#### Optimized 3S carriage masters the curve with flying colors

The carriage on the Penken 3S lift was completely reengineered so that it would be optimally equipped to handle the complex task of traveling along the curve. "We also adapted the 3S carriage for Mayrhofen to the new rope guidance configuration so that it's properly equipped to handle the curve," explains Peter Luger. Doppelmayr had to protect the sheaves against excessive wear as the new rope guidance configuration and the angle of the curve mean a significant increase in the forces exerted on all the materials in comparison with the situation on the predecessor lift. The mechanical design also posed new challenges for Doppelmayr's development engineers. A new rope sheave was developed. The safety monitoring system for the rope position on the tower in the curve is also a new development from Doppelmayr's electrical engineering department. Central visualization is provided in the stations.

#### Ride comfort sets new standards

To achieve maximum ride comfort for passengers on the Penken 3S lift, Doppelmayr designed a long rope saddle (approx. 50 meters in length). As a consequence, passengers only register that the lift is following a curve when their line of sight changes. The passage of the cabins over the tower is very smooth and quiet. "The curve saddle on the 3S tower for Mayrhofen underlines yet again our technology leadership in the area of tricable gondolas. We even succeeded in exceeding the customer's expectations in terms of ride comfort, attractiveness and safety," adds a satisfied Peter Luger. | 1

#### 30-TGD Penken Lift

Length of curve saddle	<b>approx. 50 m</b>
Saddle radius	<b>approx. 70 m</b>
Axis angle	<b>6.5°</b>

#### Technical highlights of the Penken lift at a glance

- Curve tower
- Vertical conveyor
- Easy boarding
- Fully automatic battery charging system
- Fully automatic central lubrication for the rope saddles on all towers
- WLAN entertainment





# A new lift for Nauders in just six weeks

A ski season without the Bergkastel lift would have had disastrous consequences for several municipalities and placed the survival of many businesses under threat.

Shortly before the start of the winter season, a fire destroyed a large part of the bottom station building on the Bergkastel lift – rebuilding it was a major achievement.

The operating company Bergbahnen Nauders had great plans for their winter season 2015/16. The bottom station of the Bergkastel lift built in 1990 was to be refurbished and turned into a “ski lift center” complete with many new offers and services. The work was

proceeding at full steam and the refurbishment nearly completed when fire broke out on October 21, 2015, destroying most of the building, complete with lift station and the carrier parking facility. The start of the season planned for December – and with it the opening of the ski resort – suddenly seemed impossible.

## Loss of basic infrastructure

“An initial inspection of the site revealed that the bottom station of the lift was a total write-

off. The rope was torn as a result of temperatures as high as 750 °C and some of the cabins had consequently been thrown to the ground,” reports Doppelmayr sales manager Andreas Natter. In spite of all this, the operating company was clear about one thing: The winter season had to open on December 10. “The ski area is not just essential for tourism in Nauders, but for all the surrounding communities as well – on the whole, it can be said that impairment of the basic infrastructure in Naud-



ers would have had disastrous consequences for an area offering around 10,000 beds," explains Heinz Pfeifer, managing director of Nauderer Bergbahnen. In economic terms, local businesses are clearly focused on the winter season. A winter without the Bergkastel lift, and therefore without an intact ski area, would have caused a severe drop in room-nights and placed the survival of many of the region's tourist operations in serious jeopardy. "After a brief review of our resources and consultations with our partner companies, we were able to assure the customer that the December opening was an achievable goal," explains Andreas Natter. Within days, Doppelmayr had already completed the installation diagrams and started production on October 23.

Efficient crisis management

The very next day after the fire, Doppelmayr was on site to assess the damage, plan and coordinate the reconstruction work, and attend the first meeting with the crisis management team. The entire bottom station was cleared and demolished in the days that followed and the necessary work to rebuild the roof got under way. This meant that Doppelmayr was able to start the initial repair work on October 26. The first job was to remove the rope, retrieve the cabins and take them down to the bottom of the mountain for inspection. Fortunately, only one cabin was so severely damaged that

it was no longer fit for use. Design measures in the area of the station ensured that capacity could be maintained.

Wave of solidarity

After just six weeks of reconstruction work, the Bergkastel lift went back into service on December 11, 2015 – only one day after the scheduled start of the season – in no small measure thanks to the outstanding collaboration between all the parties involved.

"The events met with a huge wave of solidarity among companies, partners and the general public. Everyone involved in the reconstruction put in a superhuman effort and got things done at a pace that nobody would have thought possible. Even neighboring ski resorts offered assistance. For my part, I've rarely experienced such a fantastic spirit of community and solidarity when working with other companies – and among our own employees and the general public."

Heinz Pfeifer,  
Managing Director of  
Bergbahnen Nauders



Robert Mair, the mayor of Nauders, was also visibly relieved: "Without Doppelmayr, the support of the lift employees, the partner compa-

nies involved and the local residents, it would never have been possible to rebuild the lift within such a short time frame. In this exceptional situation, they were willing to give their all. And we are extremely grateful to them."

Special thanks are also due to the authorities for their outstanding cooperation. In particular, to Jörg Schröttner and his team from the Federal Ministry for Transport, Innovation and Technology, who handled the proceedings with their usual smooth efficiency. | 1



The ribbon is cut and the new ski lift center officially opened: (from left to right) MD Manfred Wolf, Deputy Mayor Helmut Spöttl, MD and Mayor of Nauders Rober Mair, Provincial Governor Günther Platter, Helmut Wolf (Chairman of Local Advisory Council) and MD Heinz Pfeifer.



The ski lift center in the new bottom station offers a wide range of amenities and services.

Reconstruction of the Bergkastel lift – timeline	
10/21	Fire at ski lift center: lift station and carrier parking almost completely destroyed
10/22	Doppelmayr on site for crisis meeting
10/23	Production start at Doppelmayr
10/24-25	Lift hall cleared
10/26	Rope removed, cabins retrieved and inspected; repairs started
10/30	Doppelmayr confirms: "Opening date is doable"
11/16	Installation start with 3-5 crews
11/21-23	Rope installed and spliced
11/28	Electrical operation of lift
12/10	Approval by supervisory authority
12/11	Bergkastel lift opened



## High-speed chairlift with top comfort




The modern installation in Brixen has a speed of six meters per second as well as heated seats, comfort suspension and bubbles.

In the SkiWelt Wilder Kaiser-Brixental, the operating company Bergbahn Brixen im Thale recently opened its new Joch lift with a speed of six meters per second. It replaces a quad chairlift and a surface lift, and has also been extended. It now covers the lower section of the downhill run as well, making it twice as long. Furthermore, the Joch lift makes a significant contribution in terms of sustainability.

The 180-square-meter photovoltaic installation on the south side of the chair parking facility is used to generate electricity. The design of the lift, with chairs in a combination of elegant black and noble red, makes it a standout feature of the SkiWelt.

### Fun on the snow and ride comfort

Even for Doppelmayr – who provided both the ropeway and the electrical engineering – implementing such a fast lift was a challenge. The result speaks for itself. | 



### 8-CLD-B Joch Lift

Operator	<b>Bergbahn Brixen im Thale AG</b>
Location	<b>Brixen im Thale, Tyrol (AUT)</b>
Speed	<b>6.0 m/s</b>
Capacity	<b>3,000 PPH</b>
Inclined length	<b>2,002 m</b>
Carriers	<b>74 chairs, 8 passengers each</b>
Towers	<b>19</b>
Construction	<b>April through October 2015</b>
Opened	<b>December 2015</b>

"The Joch lift is impressive proof of Doppelmayr's professionalism – and the fact that we can always work with them to come up with something new. That's also great for our guests when we can offer them modern lifts with top comfort."

**Rudi Köck, General Manager of Bergbahn Brixen im Thale AG**



## High-tech gondola lift wows SkiWelt guests




The brand new Hartkaiser lift in Ellmau incorporates the very latest in ropeway technology.

The old Hartkaiser funicular carried 34 million passengers during its 44 years in operation. In April 2015, it made its last trip in SkiWelt Wilder Kaiser-Brixental and has now been replaced by a high-capacity 10-passenger gondola lift. Transport capacity has more than doubled and the trip takes just over eight minutes. The cabins offer the utmost comfort, with features such as heated seats for the uphill and down-

hill journeys, LED interior lighting and WLAN access. The cabins are also higher and wider than usual as most of the ski racks are on the inside, while additional space for snowboards and skis is also available outside.

### Comfort for lift users

The long boarding area and the very low station transit speed make access to the barrier-free cabins even more convenient and hassle-free, benefiting seniors and families with children in particular. "With the 10-passenger gondola lift and the multifunctional station buildings, we

achieve a new dimension in comfort, service and speed – precisely what we wanted for our guests," says a delighted Klaus Exenberger, managing director of the operating company, Bergbahnen Ellmau. An entirely new feature on the lift is the loading and unloading facility in the new intermediate station. | 



### 10-MGD Hartkaiser Lift

Operator	<b>Bergbahnen Ellmau-Going GmbH &amp; Co KG</b>
Location	<b>Ellmau, Brixental, Tyrol (AUT)</b>
Inclined length	<b>2,269 m</b>
Vertical rise	<b>703 m</b>
Capacity	<b>3,200 PPH</b>
Speed	<b>6.0 m/s</b>
Trip time	<b>8.6 min</b>
Carriers	<b>87 cabins</b>



## Highlight in summer and winter

The Summit Express is the first combination lift in the southeastern United States.

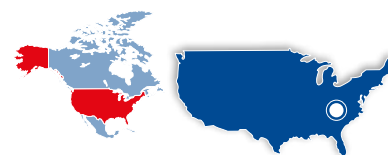
Sugar Mountain Resort in North Carolina (USA) boasts a new attraction. The combination lift known as the Summit Express celebrated its grand opening in the popular skiing and hiking region of the Southern Appalachians on November 15, 2015. The lift offers a mix of 6-seater chairs and 8-passenger cabins, and operates in the summer as well in the winter. It carries some 2,500 passengers per hour. Initially, the lift will be running with 6-seater chairs



only. The cabins are expected to be available in the next few years. The Summit Express is the sixth project Sugar Mountain Resort has completed with Doppelmayr. "In the projects we've built to date, Doppelmayr has been a reliable partner, manufacturing top products and ensuring professional implementation. And whenever we have a query, the customer support team is always quick to respond," says Gunther Jochl, President of Sugar Mountain Resort.

### Innovations for the guests

North America has very few ropeways that combine chairs and cabins. In the southeastern United States, where Sugar Mountain Resort is located, the Summit Express is the first combination lift ever built. "Our guests expect to be offered something new every year. Therefore it's important that we continue to develop and provide innovations with a wow factor," explains Gunther Jochl. Both summer and winter tourism will benefit from the new installation. | 1



### 6/8-CGD Summit Express

Operator	<b>Sugar Mountain Resort Inc.</b>
Location	<b>Sugar Mountain, North Carolina (USA)</b>
Ropeway system	<b>Combination lift</b>
Carriers	<b>62 6-seater chairs, 16 8-passenger cabins</b>
Inclined length	<b>1,542 m</b>
Vertical rise	<b>351 m</b>
Speed	<b>5.0 m/s</b>
Capacity/direction	<b>2,518 PPH</b>

## Almost 100-year-old funicular modernized

From old to new: Thanks to Garaventa, the protected historic funicular Le Châtelard-Château d'Eau in Switzerland shines in new splendor.

The VerticAlp Emosson nature park in the canton of Valais is home to the Châtelard funicular railway, built in 1920, which has undergone a complete technical overhaul performed by Garaventa. As the installation is included in the Swiss Inventory of Ropeways – a list of installations of particular cultural, historical or technical importance – preservation as well as technical aspects had to be considered for the rebuild project.



### Enhanced attractiveness

In order to maintain the original route dating back to 1920, with its exceptionally demanding alignment and large differences in gradient, Garaventa developed some unique technical solutions specifically designed for this funicular. The ropeway experts replaced the entire electro-mechanical equipment on the installation. The new brake system does away with the need to include a ballast carrier as counterweight. Another new feature is the two attractive cabins



"The collaboration with Garaventa and their people was excellent. With their help, we were able to put a spanking new funicular into service within the set deadline, while preserving the infrastructure built at the beginning of the twentieth century. Guests can look forward to enjoying a great ride against the magnificent backdrop of Mont Blanc." | Gilbert Simon, Operations Manager, VerticAlp Emosson

with panorama roofs, which make the ride even more enjoyable for local users and tourists. The funicular was originally used as a means of transport for workers and materials during the construction of the Barberine dam. | 1



### 60-FUL Le Châtelard – Château d'Eau

Owner	<b>VerticAlp Emosson formerly Parc d'Attractions du Châtelard</b>
Location	<b>Le Châtelard, Valais (CHE)</b>
First built	<b>1920</b>
Vertical rise	<b>693 m</b>
Inclined length	<b>1,310 m</b>
Maximum gradient	<b>87 %</b>
Capacity	<b>372 PPH</b>
Carriers	<b>2 cabins with panorama roof, 60 passengers each + driver</b>
Opened	<b>May 2015</b>



# Triple upgrade for Hindelang-Oberjoch



The Allgäu ski resort is enhancing its offer with the addition of a particularly child-friendly feeder lift as well as another two chairlifts.

The Oberjoch skiing and hiking region has modernized. Doppelmayr installed three new chairlifts in Germany's highest mountain village: two 6-seater chairlifts plus an 8-seater with bubbles. These three lifts replace a total of six existing surface lifts and will in future operate in the summer as well as in the winter.

### Higher standards of comfort and safety

Doppelmayr played a decisive role in the choice of the optimal lift locations. During the planning phase, the experts conducted a series of studies which compared alternative options in terms of lift locations, ski trail areas and skier flows. The result: The three new chairlifts – one of which is particularly attractive for families with small children – are precisely tailored to the needs of skiers and operating company, create greater clarity in the layout of


amenities and provide a significant boost for comfort and safety standards in the region. At the same time, the operating company will be increasing its energy efficiency by using Doppelmayr Sector Drives (DSD).

### Impressive modernization

As from the current season, families with children have benefited from the new child-friendly 8-seater Schwanden lift in Hindelang-Oberjoch. The Skippy chairs are designed to prevent children from slipping out of their seats and are fitted with fully monitored automatic closing of the restraining bars. They help to make the uphill ride an exciting experience for the younger guests, while enabling the adults to sit back and relax.

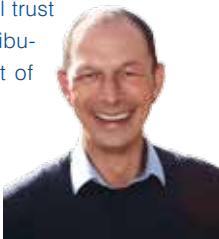
The Grenzwies and Wiedhag lifts, both equipped with 6-seater chairs and individual footrests, also provide a striking illustration of the extensive modernization of the Oberjoch ski area. The technical construction and visual design of the lifts cannot fail to impress.


### From project development to start-up


Doppelmayr was responsible for the project development and site management as well as supplying the complete ropeway equipment including electronic control system. "We are extremely pleased that Doppelmayr was able to help us achieve our goals of improving family friendliness and comfort as well as energy efficiency in such a straightforward and professional manner," says supervisory board member Hubert Holzheu. | 

"Doppelmayr provided all-round assistance, which made implementation so much easier for us. The proactive project development and advice based on mutual trust made a decisive contribution to the achievement of an impressive result."

Eric Enders,  
CEO of Bergbahnen  
Hindelang-Oberjoch AG



 8-CLD-B Schwanden Lift	
Owner	Bergbahnen Hindelang-Oberjoch AG
Location	Bad Hindelang, Bavaria (GER)
Inclined length	487 m
Vertical rise	94 m
Speed	5.0 m/s
Capacity	2,800 PPH
Carriers	24 chairs (Skippy children's chairs)
Trip time	2.1 min
Start-up	December 2015

 6-CLD-B Grenzwies Lift	
Owner	Bergbahnen Hindelang-Oberjoch AG
Location	Bad Hindelang, Bavaria (GER)
Inclined length	885 m
Vertical rise	270 m
Speed	5.0 m/s
Capacity	2,800 PPH
Carriers	52 chairs
Trip time	3.34 min
Start-up	December 2015





6-CLD-B Wiedhag Lift	
Owner	Bergbahnen Hindelang-Oberjoch AG
Location	Bad Hindelang, Bavaria (GER)
Inclined length	1,058 m
Vertical rise	319 m
Speed	5.0 m/s
Capacity	2,800 PPH
Carriers	60 chairs
Trip time	3.91 min
Start-up	December 2015

## New aerial tramway with ocean view in Madeira

A great feat of engineering provides visitors with access to a picturesque stretch of the coast.

On the Portuguese island of Madeira in the Atlantic Ocean, an attractive new reversible aerial tram in the picturesque Quinta Grande takes guests directly to the land by the sea. The tram runs from a clifftop plateau to a fertile area of low land next to the coast – referred to as a “fajã”. The installation replaces two out-moded passenger and freight elevators which

ran on the steep cliffs. “The new aerial tram is a more efficient and safe means of transport that enables more passengers and freight to be carried – and it also makes this beautiful place easier to reach for our visitors of all types and ages,” explains Eng. João Guerreiro, project manager, from Doppelmayr’s long-standing customer ETERMAR.

**Average gradient over 80 percent**  
On its descent from the clifftop, the aerial tram covers a drop of 316 vertical meters over a to-

tal length of 385 m, which equates to an average gradient of over 80 percent. Doppelmayr was responsible for the electromechanical equipment on this project, which includes special safety features. In view of the steep terrain, the tram was built with an integrated rescue system. The ropeway professionals provided assistance during construction and rope installation as well as taking charge of the commissioning and the training of local personnel on site. | [📄](#)



8-ATW Fajã dos Padres	
Owner	ETERMAR – Engenharia e Construção S.A.
Location	Quinta Grande, Madeira (PRT)
Vertical rise	316 m
Inclined length	385 m
Average gradient	82.2 %
Carriers	2 cabins for 8 passengers each
Opened	December 2015





# All-round mountain experience on the TITLIS Xpress



## 8-MGD TITLIS Xpress

Operator	Bergbahnen Engelberg-Trübsee-Titlis AG
Location	Engelberg, Obwalden (CHE)
Lift type	Detachable gondola lift with 2 sections
Capacity	2,475 PPH
Carriers	164 cabins, 8 passengers each
Opened	December 11, 2015


The new gondola lift is now one of the highlights of the Engelberg-Trübsee-Titlis ski region thanks to innovative technology and panorama glazing.

Top safety, optimal comfort and maximum availability – these were the priorities for the operating company, Bergbahnen Engelberg-Trübsee-Titlis AG, when planning the new 8-passenger gondola lift known as the TITLIS Xpress. The impressive result incorporates cutting-edge ropeway engineering. Waiting times in the bottom station have been drastically reduced, and passengers enjoy a significantly improved loading and unloading experience. The finely tuned grip opening and closing technology enables low transit speeds in the stations, which offer level access and therefore particularly relaxed boarding of the cabins. This benefits winter sports enthusiasts, but

also families with children and guests from around the globe. The ride in the CWA cabins with panorama glazing provides an unrestricted view of the mountain landscape.

### Greater safety and operational efficiency

The TITLIS Xpress comprises two sections, which can either be operated individually or together. A particular challenge for the ropeway engineers was the longitudinal profile of the first section. Immediately after the bottom station, the cabins have to climb a steep slope with a vertical rise of 250 meters before proceeding through a long depression in the landscape and underneath an existing aerial tramway in the direction of the Trübsee lake. This called for ingenious positioning of the towers. The installation incorporates the Rope Position Detection (RPD) system as well as an integrated recovery concept. The RPD uses sensors on the towers to identify any deviation of the

rope position at an early stage, thus offering top safety and availability. The redundantly implemented evacuation drive can be used to bring all 160 cabins back to the stations in a recovery situation. The availability of the installation is crucial as the TITLIS Xpress is open 353 days in the year. 



"The stipulation was that the construction and installation of this major investment had to be carried out alongside normal daily operations. This was perfectly mastered without a single day of interruption!" | **Norbert Patt, CEO of Bergbahnen Engelberg-Trübsee-Titlis AG**

## Key specifications of the TITLIS Xpress

Section	Engelberg – Trübsee	Trübsee – Stand
Inclined length	2,685 m	1,996 m
Vertical rise	781 m	644 m
Speed	6.0 m/s	6.0 m/s
Trip time	9.0 min	7.0 min
Carriers	92 cabins	72 cabins
Haul rope diameter	56 mm	56 mm



◀ In November 2014, Bergbahnen Engelberg-Trübsee-Titlis AG built the New Rotair with revolving cabins on Mount Titlis in collaboration with Garaventa.

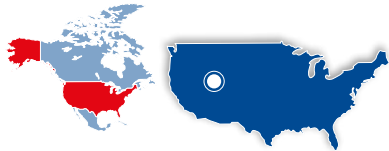


# Park City and Canyons become the biggest ski resort in the US

Vail Resorts links two ski resorts with the Quicksilver 8-passenger gondola lift – for an even bigger snow experience.

The Quicksilver 8-passenger gondola lift opened in December connects the two existing ski destinations Canyons Resort in Park City and Park City Mountain Resort. This has created the biggest ski resort in the United States. Skiers and snowboarders now have a fast and comfortable means of traveling from

one ski resort to the other, giving them even more possibilities to expand their snow experience. The special feature of the Quicksilver lift is the angled mid station. Three bullwheels were required to achieve this alignment. In addition, the track width widens from 5.2 meters to 6.1 meters. As well as taking care of the lift planning and installation, Doppelmayr was also responsible for on-site personnel training. The collaboration between Vail Resorts and Doppelmayr stretches back to the 1980s. | 1



8-MGD Quicksilver	
Owner	Vail Resorts
Operator	Park City
Location	Park City, Utah (USA)
Lift type	Detachable 8-passenger gondola lift (winter operation)
Capacity	up to 1,500 PPH
Inclined length	2,396 m
Speed	5.0 m/s
Carriers	61 CWA 8-Omega LWI cabins

“The Quicksilver Gondola has made our vision of creating the largest resort in the United States a possibility by physically linking both sides of the mountain together. This centerpiece of Park City will allow our guests to experience 7,300 acres of skiing and snowboarding on over 300 trails and explore brand new terrain off the mid station of Quicksilver. Doppelmayr’s work on the project is helping us transform our resort into a new mountain experience.”

Brian Suhadolc,  
Senior Director of Mountain  
Operations, Park City.



# King Con: New chairlift for greater comfort

Guests of Park City now reach their destination with greater speed and comfort thanks to the new 6-seater chairlift.

As well as becoming the biggest ski resort in the United States in November 2015, Utah’s Park City Resort boasts another addition to its list of attractions with the new King Con chairlift. The six-pack provides transport capacity

for up to 3,400 winter sports enthusiasts per hour. The old quad chairlift had to be replaced in view of the large numbers of visitors. A new loading carpet makes boarding one of the new lift’s 90 chairs a high-comfort experience. Brian Suhadolc, Senior Director of Mountain Operations for Park City, commented as follows: “The transformation of the King Con lift into a six-person detachable will greatly enhance

our uphill capacity and ability to move guests around the mountain. Access to the terrain off of the King Con lift will now be made easy with Doppelmayr’s work on this project.” | 1



6-CLD King Con	
Owner	Vail Resorts
Operator	Park City
Location	Park City, Utah (USA)
Lift type	Detachable 6-seater chairlift (winter operation)
Capacity	up to 3,400 PPH
Inclined length	1,298 m
Speed	5.0 m/s

The latest Doppelmayr lifts for the biggest ski resort in the US:

- Quicksilver 8-passenger gondola lift
- King Con 6-seater chairlift
- Motherlode quad chairlift (relocation)





## Milestone becomes modern ropeway highlight



Mellau's first detachable gondola lift from Doppelmayr provided 43 years of reliable service – but the time had come to modernize the entire installation.


When the Mellau lift was built back in 1972, this 4-passenger gondola marked a major milestone in Doppelmayr's company history. It laid the foundation for the international success of detachable ropeway technology. The new 10-passenger gondola lift went into service on schedule for the start of the 2015/2016 winter season. At 3,000 passengers an hour, the new lift offers three times the capacity of its predecessor. The trip along the two-kilometer route takes just six minutes.




"We sent the old Mellau lift into its well-earned retirement after 43 years of service. Passenger numbers have increased as a result of the link-

up between the Mellau and Damüls resorts. The new lift enables us to handle these volumes with ease – waiting times are now history. When implementing the project with our long-standing partner Doppelmayr, our top priority was comfort for the skiers and snowboarders." | **Herbert Frick, Managing Director of Bergbahnen Mellau.**

**Investments in comfort and infrastructure**  
Generously dimensioned CWA cabins in elegant black with ski racks on the outside replace the original 4-passenger carriers. The new lift is designed for all-year operation as well as for running both day and night. In the winter, it serves as a feeder lift for the Mellau-Damüls ski region. A special feature is the eight-meter-long loading area, which gives passengers considerably more time for boarding. The infrastructure around the new lift has also been expanded. The new bottom station houses a ski hire, sports shop, ski school and ski storage facilities as well as new restaurants. When it came to the design of the new top and bottom station buildings, the operating company was keen to see modern architecture and harmonious integration into the natural landscape. From the Rossstelle top station, which now also accommodates a large part of the cabin

parking facilities, visitors can enjoy a breathtaking view down into the valley and across the surrounding mountain panorama. | 



 10-MGD Mellau Lift	
Owner	Bergbahnen Mellau GmbH & Co KG
Location	Mellau, Vorarlberg (AUT)
Length	2,010 m
Vertical rise	680 m
Speed	6.0 m/s
Capacity	3,146 PPH
Drive	DSD with particularly quiet, slow-running gear stage





## Long-awaited feeder for Alba and Canazei opens



The new major attraction brings with it two decisive benefits: shorter waiting times in the ski area and less traffic in the region.

The Dolomiti Superski region has boasted a special new installation since the start of the current season. The Funifor Alba-Col dei Rossi brings up to 1,120 passengers an hour from the Italian village of Canazei into the Sellaronda ski circuit. As well as relieving pressure on the existing 12-passenger Canazei-Belvedere ropeway, the new installation helps to reduce traffic in the region. For additional ride comfort, Doppelmayr developed a new carriage with 24 wheels and six track rope brakes. This is connected to the cabin by means of a star-shaped hanger, giving the impression of a unified whole. "The new Funifor is a real visitor magnet for our ski resort – the construction is truly impressive," says Daniele Dezulian, vice president of DOLEDA SpA.

### Taking landscape and environment into account

When building the top and bottom stations, the operating company took care to ensure that the structures blended in with their surroundings. To minimize any environmental impact, the bottom station is integrated into the building and has

a landscaped roof. The top station at 2,377 m is also a highlight for guests. The front section is built on pillars and parts of the return machinery are exposed to view. From the glazed passenger area, skiers are treated to a breathtaking view of the surrounding Dolomites. | 1



DOLEDA SpA

### 100-FUF Alba – Col dei Rossi

Owner	DOLEDA Impianti funiviari SpA
Location	Canazei, Trentino (ITA)
System	Funifor
Inclined length	2,260 m
Speed	12.0 m/s
Trip time	5.0 min
Cabin capacity	100 passengers

### Upgrade of the aerial tramway Pordoipass-Sass Pordoi



The existing reversible aerial tramway Pordoipass-Sass Pordoi also shines in new splendor. An extensive rebuild of the installation, which was last modernized 20 years ago, was completed in time for the start of the current winter season. This included new cabins in a futuristic design – similar to the cabins on the new Funifor. The drive was replaced by a modern AC solution, enabling a higher speed of 12 m/s. Guests are delighted with the enhanced comfort.



# Doppelmayr Italia – pioneers in ropeway construction

Three companies from South Tyrol recount remarkable events. They merge and go on to make ropeway history.

**D**oppelmayr Italia can look back on over a century of company history, which is closely connected with South Tyrol's tradition of ropeway construction. The Doppelmayr subsidiary based in Lana owes its existence to the visionary genius of two outstanding engineers and ropeway pioneers: Luis Zuegg and Karl Hölzl.

Created by the 2002 merger between Hölzl Seilbahnbau, Agamatic and Doppelmayr, Doppelmayr Italia GmbH brings together the know-how and experience from over one hundred years of ropeway construction. "Our company history begins with the origins of modern ropeway construction," explains Othmar Eisath, managing director of Doppelmayr Italia.

## Pioneers of ropeway engineering

The company history of Doppelmayr Italia goes back to an area where ropeways were always needed – in the mountains of South Tyrol. The engineer Luis Zuegg, who is today regarded as the founder of modern ropeway construction, revolutionized the ropeway technology of his time with many technical achievements. Together with Karl Hölzl, he worked on a series of reversible aerial tramways, including the tramway from Merano to Hafling, which was opened in 1923. In 1945, Karl Hölzl founded his own company, whose name was to exist for over 50 years: Hölzl Seilbahnbau GmbH.

## From material ropeways to high-tech chairlifts

While Hölzl Seilbahnbau began life building material ropeways for the most part, the upswing in the tourist business in South Tyrol

"Doppelmayr Italia is the result of many years of close collaboration between three experts in ropeway construction and benefits from over 100 years of experience in the ropeway industry. That makes us one of the leading ropeway companies in Italy."

**Othmar Eisath,**  
Managing Director of  
Doppelmayr Italia







Luis Zuegg



Seceda, St. Ulrich, 1962



Latsch, 1955



Vigiljoch, Lana, 1912



Plose, Brixen, 1963



Latsch, 1955



Meransen, 1950

in the 1940s and 1950s led to a big demand for surface lifts and chairlifts – the company based in Lana grew to become one of the leading manufacturers in the ropeway industry. Ropeways were built in Austria, Germany, Slovenia and even Japan. Hölzl Seilbahnbau enjoyed particular success with a completely new, patented ropeway type: the Funifor.

#### Collaboration since the 1960s

Doppelmayr established its own subsidiary in Lana in the 1960s, where it concentrated on the construction of fixed-grip chairlifts. There was close collaboration between Doppelmayr Lana and Hölzl Seilbahnbau in this area. In view of the rapidly growing demand for continuous movement ropeways offering high capacity, the two companies founded Agamatic in 1981, which specialized in detachable chair-

lifts and gondola lifts. The next 20 years saw Agamatic build over 70 ropeway installations in South Tyrol and Trentino as well as in neighboring provinces.

#### Three become one:

##### the creation of Doppelmayr Italia

Following many years of collaboration in the Italian market, Hölzl Seilbahnbau, Agamatic and Doppelmayr Lana merged to form Doppelmayr Italia in July 2002 with a view to making optimal use of synergies and resources. "The merger of the three companies was the logical conclusion of our long, in the literal sense of the word, 'constructive' and successful partnership," emphasizes Othmar Eisath and adds: "Doppelmayr Italia benefits from the long tradition and the experience of three companies. To date, it has implemented fantastic ropeway

projects in collaboration with many strong partners in Italy – and worldwide." The company in Lana supports the Doppelmayr/Garaventa Group above all with special installations, such as on Mount Fansipan in Vietnam, in Sochi and those built by DCC (Doppelmayr Cable Car). | 3

#### Doppelmayr Italia GmbH

Merger	<b>2002</b>
Location	<b>Lana, South Tyrol</b>
Headcount	<b>88</b>
Core market	<b>Italy</b>
Activities	<b>Support for the Doppelmayr/Garaventa Group in the case of special ropeways</b>

Hölzl Seilbahnbau and Doppelmayr Lana jointly set up the company **Agamatic**, which manufactures detachable chairlifts and gondola lifts

1981

**Doppelmayr Italia** is created from the merger between Hölzl Seilbahnbau GmbH, Doppelmayr GmbH and Agamatic GmbH

The first **Funifor** is built on the Stilfser Joch

1999

2002

Completion of the **Skyway Monte Bianco**


**Thomas Pichler**, previously sales director and deputy managing director of Doppelmayr Italia GmbH, becomes the new managing director of Doppelmayr Seilbahnen GmbH


2015






## James Bond in hot pursuit on the Gaislachkogel lift

Bond and the mountains – an alliance with tradition. Sölden and the Gaislachkogel in Tyrol's Ötztal provided locations for the latest James Bond film "Spectre". Daniel Craig and his co-stars as well as an almost 500-strong crew used the Alpine hotspot from December 2014 to February 2015 to shoot action-packed film scenes. The designer restaurant "ice Q" at the summit of the Gaislachkogel played a central role in the storyline. The glass cube at 3,048 m, which normally impresses winter sports enthusiasts with stunning views of the Ötztal Alps through the 900 m<sup>2</sup> glass façade, acts as an exclusive sanatorium. James Bond and his adversaries deliver some spectacular chases: on Sölden's ski slopes, over the famous glacier road with Europe's highest road tunnel, and even in the ultramodern tricable gondola lift supplied by Doppelmayr. 

 Impressive video footage showing how the film was made at an altitude of over 3,000 m can be seen here.



## On your marks, get set, go!

The Vorarlberg Business Run held in September included a race focusing on apprentices for the first time. Doppelmayr took part with five teams, including 18 apprentices and two instructors. They completed the five-kilometer course with the fastest times to claim four podium places. In the disciplines "fastest team of apprentices and instructors" and "fastest mixed apprentices team", the respective Doppelmayr team came in second place in the overall ranking. In the category "men's fastest apprentice", both first and third places went to Doppelmayr. A total of 260 apprentices took part in the Business Run. 



## Garaventa relocates from Gwatt to Uetendorf

Garaventa has moved to a new site within the Thun region: from Gwatt to Uetendorf. "With the relocation, we retain our proximity to our customers in Berner Oberland and in Valais. I also look forward to the fact that we can now offer our employees state-of-the-art workplaces," says Peter Baumann, board member and sales and marketing director at Garaventa. When planning the new site, the management attached particular importance to simplifying and optimizing work processes. "That's an advantage which also affects production time," says Peter Baumann. Completion of the new building has meant an increase in production space from 3,000 to 4,500 m<sup>2</sup>, while office space has been expanded from 2,000 to 3,000 m<sup>2</sup>. 



## Garaventa expands site in Sion

Garaventa has invested in new office and workshop facilities at its Sion site to ensure continued optimal support for its over 450 ropeway installations worldwide. With the new workplaces occupying a total of 400 square meters, which have been available since May 2015, Garaventa has reduced capacity bottlenecks in all areas and accommodated the expansion in the workforce. The modern new building provides more space and therefore improved work safety for employees in the offices, workshops and warehouse.

With this investment, Garaventa AG is strengthening its close-knit service and maintenance network. As the focal point of activities relating to installations in western Switzerland and in Valais, the Sion site has grown to some 20 employees since it was set up two decades ago. Then as now, the team at Garaventa Sion primarily focuses on French-speaking customers, who value the regional proximity and personal contact. 



## President Heinz Fischer (AUT): “I’m impressed!”

Austrian President Heinz Fischer met up with his Bolivian counterpart, Evo Morales, in La Paz on October 1, 2015. The schedule included a joint trip on the urban ropeways from Irpavi (green line) to Mirador station (yellow line) in El Alto, which have turned La Paz–El Alto into a model city. His response to the visit: “I’m impressed! Ten years ago, I would never have imagined that aerial ropeways could provide such an innovative solution for urban transport. This is also my first ride on an urban ropeway.” On his Facebook page, Heinz Fischer described the ropeway network as a “prestige project for Austria”. During his trip to Bolivia accompanying a business delegation, the President also visited the Economic Chamber’s Austro-Bolivian Business Forum. | [1](#)



➤ Details on apprenticeships for ropeway technicians



## Training skilled workers to cover future needs

In the past 50 years, the number of ropeways in Austria has almost tripled. At the same time, technical developments raise the bar for skilled workers. In response, a three-and-one-half-year apprenticeship for ropeway technicians was introduced in Austria in 2008. “However, only 75 out of 254 ropeway companies provide training places for urgently needed skilled workers,” says Alois Innerhofer, ropeway technology training coordinator at the provincial vocational college in Hallein. Apprentices can complete the theoretical part of their training at the college as well as carrying out practical work on ropeways. The ropeway hall houses a detachable monocable gondola with top and bottom stations from Doppelmayr. The system courses for budding operations managers, which have been legally required since 2014, are also held here. | [1](#)

## Pioneering 1st International Urban Ropeway Congress

From October 20 to 23, 2015, La Paz hosted the first international congress dedicated to urban ropeway construction (Congreso Internacional de Transporte por Cable Urbano). The event was aimed at passing on the experience gained with urban ropeways to decision-makers in local and national government.



Some 800 participants, who included ropeway experts, government ministers, technical delegations and scientists as well as representatives from development banks, universities and consulting firms, took part in the exchange of know-how and experience. Dozens of high-caliber experts gave talks and illustrated the potential of urban ropeways on the basis of real-world examples. DCC’s CEO Markus Schrentewein also addressed the international audience

and presented the possibilities available from Doppelmayr’s Operations Services. The Doppelmayr/Garaventa Group had its own large stand at the event. During the congress, which is to become a regular event, an association was also formed for operators (AITCU – Asociación Internacional de Operadores de Transporte por Cable Urbano). Current members are Mi Teleférico, Metro de Medellín, MIO Cable and Emirates Air Line. | [1](#)

### Imprint

Proprietor, editor and publisher: Doppelmayr Seilbahnen GmbH, Postfach 20, Rickenbacherstrasse 8-10, 6922 Wolfurt, Austria, dm@doppelmayr.com, www.doppelmayr.com; text and editing: Doppelmayr Seilbahnen GmbH in collaboration with ikp Vorarlberg GmbH, www.ikp.at; graphics and layout: Doppelmayr Seilbahnen GmbH in collaboration with KONZETT BRENNDÖRFER, www.agenturkb.com; photos: Doppelmayr; printing: Thurnher, Rankweil; editorial policy pursuant to §25 Media Act: up-to-date information for customers, partners and employees of the Doppelmayr/Garaventa Group; publication frequency: the magazine is published three times a year and distributed free of charge to customers and partners of the Doppelmayr Group. Reprinting only permitted with statement of source and explicit written authority; status: February 2016; errors and omissions excepted; General Terms and Conditions apply.

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



# SPECTRE

007<sup>™</sup>

ONLY IN CINEMAS



SPECTRE® 2015 DANJAO, LLC. METRO-GOLDWYN-MAYER STUDIOS INC., COLUMBIA PICTURES INDUSTRIES, INC. SPECTRE, 007<sup>™</sup> IMAGE003.PNG AND RELATED JAMES BOND TRADEMARKS® 1962-2015 DANJAO, LLC AND UNITED ARTISTS CORPORATION. SPECTRE, 007<sup>™</sup> IMAGE003.PNG AND RELATED JAMES BOND TRADEMARKS ARE TRADEMARKS OF DANJAO, LLC. ALL RIGHTS RESERVED.