

WIR

The Customer Magazine of the Doppelmayr/Garaventa Group Issue 2/2017

 Doppelmayr®


GARAVENTA

42nd Year/No. 202



Doppelmayr Connect

Welcome to the future

First-class ropeway for Saalbach- Hinterglemm

D-Line impresses with high performance and elegance

Three new ropeways in Rosa Khutor

Riding on a wave of success since the 2014 Olympics



Technical showpiece

The new ropeway control system, Doppelmayr Connect, provides the ideal combination of function and design with a clear focus on user needs.



High-capacity, low-noise and energy-saving

The Schönleiten lift has two direct drives and offers an impressive first-class experience.



Everything in perfect tune

The optimal ropeway system with custom drive solution is precision work from Doppelmayr/Garaventa.



New ropeways in Rosa Khutor

Three new detachable ropeways recently supplied by Doppelmayr ensure a top leisure experience in the Sochi ski region, which hosted the 2014 Olympics.



News from around the world

Doppelmayr/Garaventa reports on installations under construction or in the planning stage: this time from Innsbruck, Moscow, Hon Thom and the Zugspitze.

Passion for ropeways



Satisfied guests provide the most gratifying confirmation for our customers. When skiers are delighted with the ride comfort and urban residents see mobility as an asset, then we can be sure we have done our job properly. We have a work-intensive year behind us with new highlights, new records and a major new technical development for the Doppelmayr/Garaventa Group: Doppelmayr Connect – our new ropeway control system.

Doppelmayr Connect is visionary for the ropeway industry. When developing the new system, our engineers took a long, hard look at operation and thought about how we could make working on the ropeway even easier than before for our customers. A milestone has been achieved with Doppelmayr Connect, which once again raises the bar in terms of operator friendliness, functionality and design.

International projects also attracted attention. A gondola lift in Sölden, which carries 4,500 passengers per hour and direction, a chairlift on the Ifen, which runs at six meters per second, and a ropeway line with five stations in El Alto all provide impressive proof of the pioneering spirit that guides our customers as well as us.

The next Winter Olympics are already on the horizon. The athletes and visitors at PyeongChang 2018 will ride on ropeways from the Doppelmayr/Garaventa Group at the Olympic venues in the Republic of Korea.

We attach particular importance to the optimal fulfillment of our customers' needs and wishes, and to building ropeways that are perfectly in tune with their specific requirements. Because each project is unique to our customers and unique for us. By working closely with our customers, we arrive at the best possible solution – because we're passionate about building ropeways. Worldwide.

Michael Doppelmayr
CEO

Benefits of the world's biggest urban ropeway network in figures

The ropeway network:

99.3 PERCENT
availability

1 KWH energy
required to carry
3 passengers


17 HOURS
a day in service

Up to **3,000** PASSENGERS
carried by each line per hour and direction



The ropeway network linking the Bolivian cities of La Paz and El Alto has already broken several records since it opened in May 2014. As a means of public transport, the 10-passenger detachable gondola lifts bring benefits for the environment and for the people – among other things, a huge time saving for the passengers. With an individual transport capacity of 3,000 passengers per hour and direction, each of the three lines operates 17 hours a day. According to a study conducted by the state-run operating company, Mi Teleférico, the total time saved per annum by a user on the yellow line (Línea Amarilla) thanks to the congestion-free and emission-free means of transport is 17 days. The ropeway network also scores on energy consumption: It requires only 1 kWh of energy to transport three passengers, whereas conventional means of transport such as minibuses need 47 kWh.

Línea Amarilla: 14 million passengers in one year

The record-holder is the yellow line. In 2015, it carried approximately 14 million passengers – its peak days are Fridays and Wednesdays. On a busy day, the number of passengers using the Línea Amarilla can be anything up to 80,000. The availability of this means of transport is virtually 100 percent. With these record figures and successes for the public transport network, the operating company has already been contacted by 83 international media organizations for interviews and reports. 

Time saving per annum for regular commuters using the Línea Amarilla

17 DAYS


Record-holder Línea Amarilla

13,837,786
passengers in 2015

 Source: Mi Teleférico



D-Line: Welcome to first class

With the D-Line, Doppelmayr/Garaventa is presenting the next ropeway generation. The design process for the D-Line focused on improvements for three important target groups: customers and investors, passengers, and the operating and maintenance crews. 105 new developments, including 31 that can be seen as innovations and 14 patent applications, bring major new benefits for all of these stakeholders: Top passenger comfort, quiet operation, simple, time-saving maintenance and many more features make the D-Line first class. 

105
New developments

31
Innovations

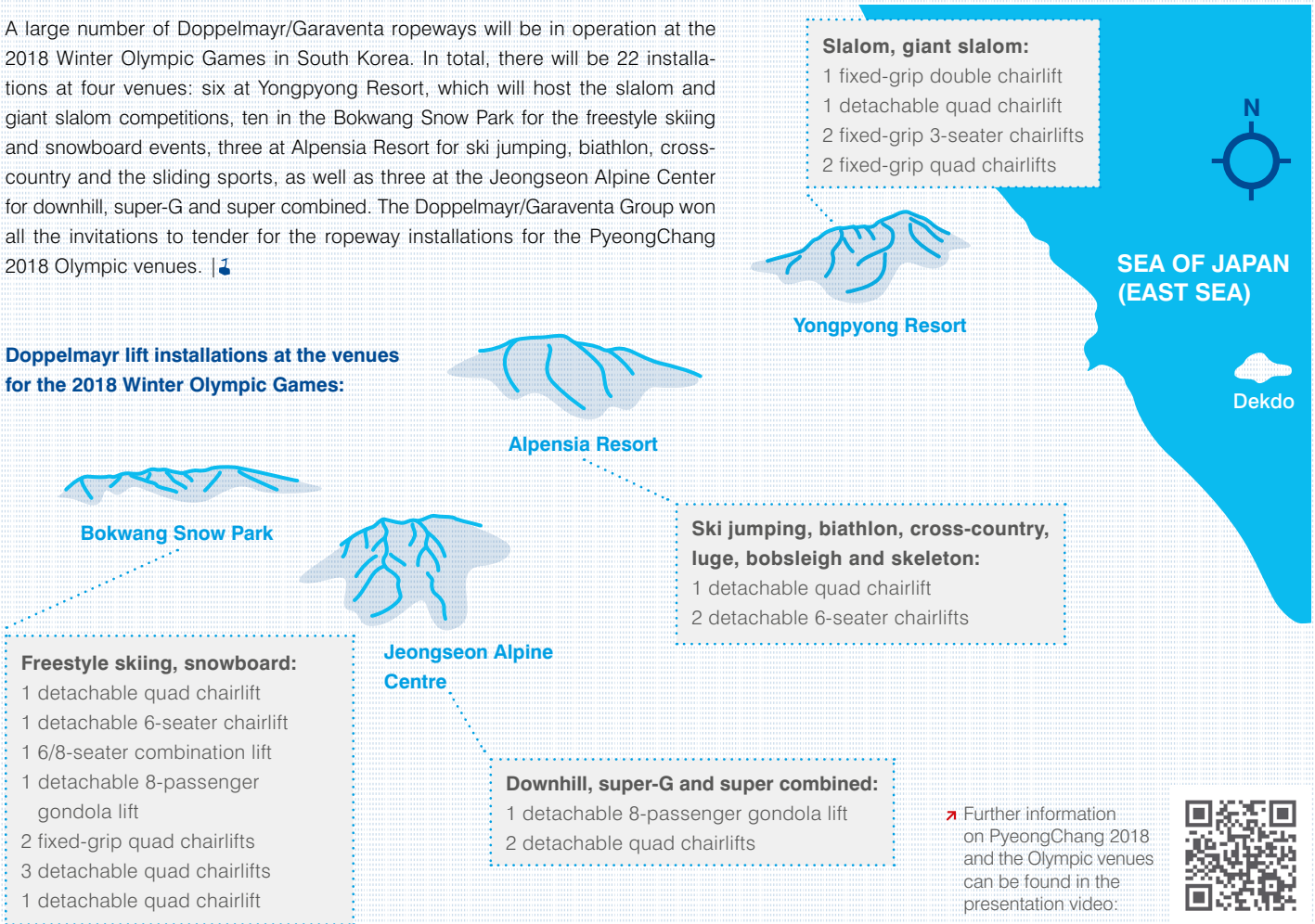
14
Patents



PyeongChang 2018 trusts in Doppelmayr

A large number of Doppelmayr/Garaventa ropeways will be in operation at the 2018 Winter Olympic Games in South Korea. In total, there will be 22 installations at four venues: six at Yongpyong Resort, which will host the slalom and giant slalom competitions, ten in the Bokwang Snow Park for the freestyle skiing and snowboard events, three at Alpensia Resort for ski jumping, biathlon, cross-country and the sliding sports, as well as three at the Jeongseon Alpine Center for downhill, super-G and super combined. The Doppelmayr/Garaventa Group won all the invitations to tender for the ropeway installations for the PyeongChang 2018 Olympic venues. | 1

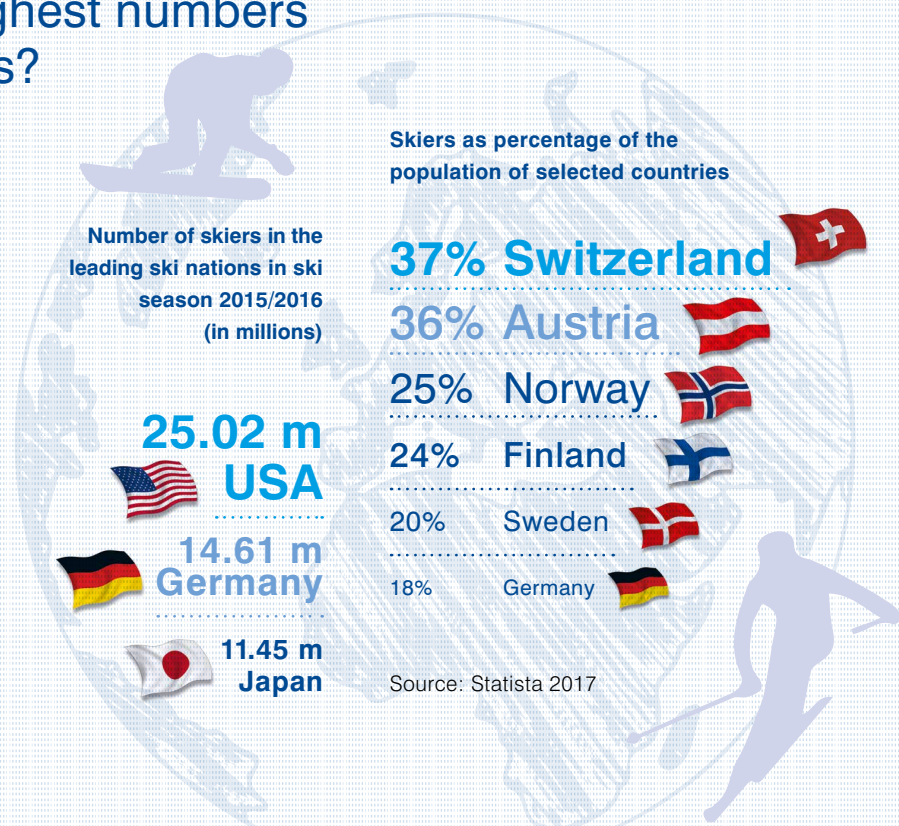
Doppelmayr lift installations at the venues for the 2018 Winter Olympic Games:



Which nations have the highest numbers of winter sports enthusiasts?

The significance of winter sports can be gauged by the number of skiers* in a given nation. According to statistics published on Statista.de, some 25 million US citizens took to their skis or snowboards in 2015/2016. In Germany, on the other hand, a survey identified almost 15 million people as active winter sports practitioners during last year's winter season. In Austria and Switzerland, ski trails were used by some 3 million people. When viewed as a percentage of the population as a whole, the statistics provide a fascinating picture. The country with the highest proportion of skiers worldwide is Switzerland. More than one in three Swiss ski. Austria has a similar proportion of skiing enthusiasts. In Norway and Finland, roughly one quarter of the population are active skiers, followed by Sweden and Germany. | 1

* In this context, skiers are defined as all winter sports practitioners who go skiing, snowboarding or pursue another alpine activity at least once during the season.



Doppelmayr Connect: cockpit for the user

The new Doppelmayr Connect control system is not only a technical masterstroke: it also offers a host of functional benefits and looks stunning into the bargain. User experience design was key in enabling Doppelmayr to focus the development effort on the needs of different users – the result speaks for itself.



Anyone taking a closer look at the ropeway control system, Doppelmayr Connect, will soon discover that as well as looking very appealing and elegant from the outside, it is also impressive to use. Doppelmayr has focused on cutting-edge technologies and also performed an in-depth analysis of user requirements as part of the development process. As a result, Doppelmayr Connect not only offers many technical benefits but also makes life much easier for the ropeway crew – thanks to intuitive

operation and transparent layout. Daniel Pfeifer, head of electrical engineering at Doppelmayr, is particularly pleased with what has been achieved: "We're delighted to see so much positive feedback regarding the new control system – and also from people who've been working with ropeways for a long time and know a lot about other control systems. That shows we have understood what our customers need."

Developed by engineers for users

Once upon a time, control systems were designed by engineers for engineers. When it came to Doppelmayr Connect, Doppelmayr opted for a completely new development approach. Two different project teams were involved with the development of the new control system. While one team concentrated on the technical equipment, the other was responsible for an in-depth analysis of the human-machine interface. The result is now a



Genuine simplification thanks to intuitive navigation



Designed by engineers for users



Short familiarization period



control system at the very cutting edge of technology, which is perfectly in tune with the needs of a wide range of users: a control system developed by engineers for users.

Who needs what?

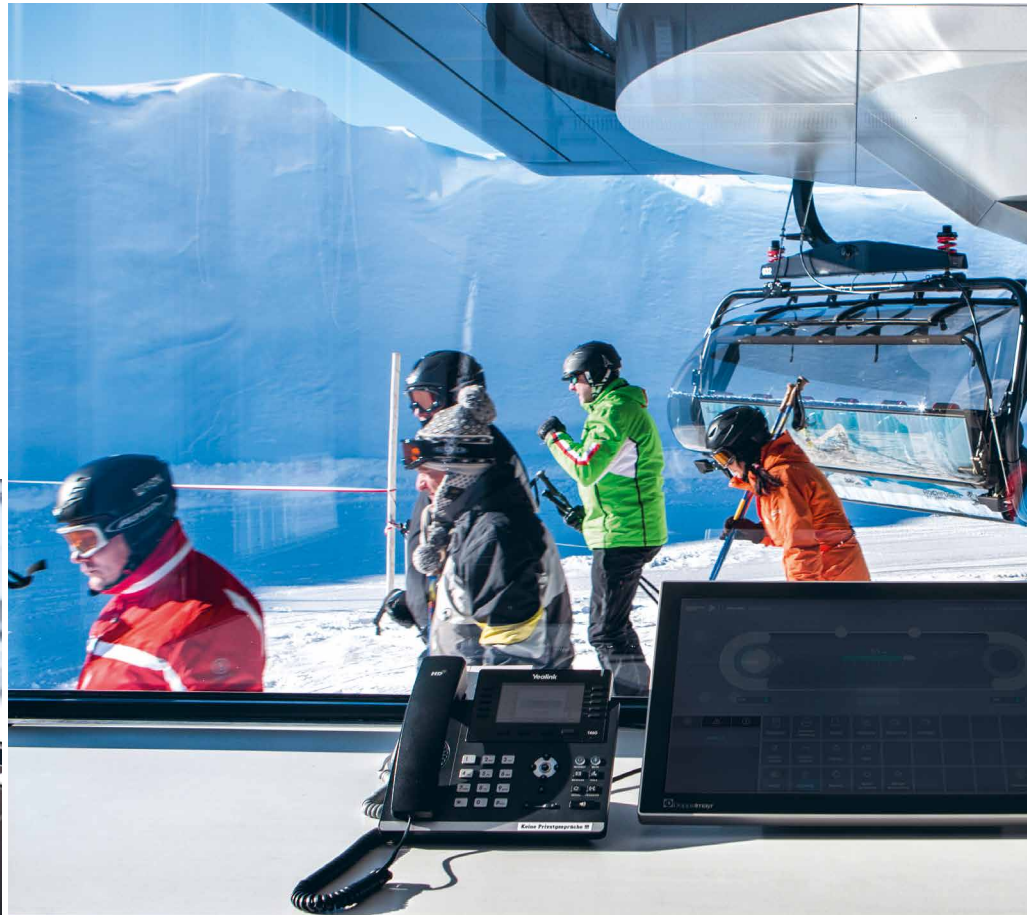
In order to be able to create optimal technical conditions for the future users of Doppelmayr Connect, the development engineers examined the context in which it would be used. For example, they analyzed what kind of people

operate a control system, their needs, their level of training, their motivation and their expectations. They asked themselves: How do these people behave in day-to-day ropeway operations, how do they respond to exceptional situations, and what information do they need? The developers put themselves in the place of everyone from the lift attendant and machine operator through to the operations manager and made sure the human-machine interface was optimally designed to suit requirements.

➤ Further technical details, impressive benefits and more information about Doppelmayr Connect can be found in the brochure:



The operating elements used on a daily basis are within easy reach.



Making light work of operation

Doppelmayr Connect shows everything an operator needs in the daily routine at a glance on the main menu: brake status, wind values, alerts on the ropeway, operating mode, etc. The ropeway employee only needs a short


training period to familiarize himself with the installation. The user interface, menu layout and navigation have a transparent and intuitive structure. Procedures are shown logically, processes realistically depicted and easy to operate with optimal functionality.

Solution Center for targeted support

The newly created Solution Center helps the user to identify the sources of problems while simultaneously suggesting possible solutions. This removes a great deal of stress from the operating process and is conducive to the professional and competent handling of any situation that might arise. All the documentation relevant to the installation, such as operating manuals, circuit diagrams, etc., is also stored in the system in digital form and is therefore readily accessible when required.

Comfort and quality writ large

In terms of the electrical engineering that has gone into the concept, Doppelmayr Connect

has been completely redesigned, using the very latest cutting-edge components. Doppelmayr Connect represents top-grade industrial electronics and therefore provides the perfect match for the ropeway technology from Doppelmayr/Garaventa. A ropeway installation forming a unified whole. Ergonomic factors were incorporated into the design of the workstation, with regard to both the configuration and the placement of the equipment. The angled position of the touchscreen ensures convenient operation of the control system while maintaining an optimal view of the station for the operator. There were also no compromises in terms of IT security. Doppelmayr's ropeway control system is embedded in a secure network, which also enables a decentralized configuration, i.e. it is no longer necessary to accommodate all the control units in the control room cabinets. As well as saving space, this means that disturbance factors in the control room such as excessive heat gain or fan noise can be avoided. 

All outdoor control units are designed to withstand the most adverse weather conditions and are fitted with a weather protection cover





Initial experience with Doppelmayr Connect

"What sets this control system apart is the entirely straightforward and user-friendly touchscreen operation – next to the control panel on the station operator's desk. The touchscreen gives you a very good overview of the key ropeway data and display values you need for operation purposes. The visualization with texts and images is also helpful as it really simplifies troubleshooting. Another great advantage is that alternative measures are suggested immediately with the deactivation concept.

"The mandatory checks and tests have to be performed prior to starting up for passenger service, just as on any ropeway. However, certain steps have been simplified by the new technology and therefore take less time. In my view, Doppelmayr is setting new standards in ropeway and electrical engineering with the D-Line, because nowadays safety, comfort and operator-friendliness are what matters in passenger transport. We can certainly recommend this control system and the D-Line concept. For our guests, in particular, the new chair sets a benchmark in terms of design, ergonomics, comfort and convenience. The 6-seater Waidoffen chairlift from Doppelmayr has meant a massive quality enhancement for our ski area."



Benefits of Doppelmayr Connect

- New, transparent user interface design
- Intuitive und logical navigation: 2-level menu navigation
- 21.5" touchscreen with Full HD resolution
- Data recording for statistical evaluation
- Use of top-grade industrial electronics with extended temperature range
- Space-optimized installation of control cabinets
- Line illumination with energy-efficient LED technology
- Remote maintenance system with IT security mechanisms
- Use of modern sensor and actuator technologies
- TÜV-certified deactivation concept
- Mobile application with fail-safe radio remote control
- Mobile user interface on tablet PC
- Carrier identification for assignment of carriers to test functions

Georg Zeller, Operations
Manager, Skiliftgesellschaft
Hochfügen GmbH





Elegance and performance

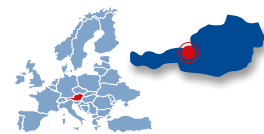
The Schönleiten lift in Saalbach incorporates the latest ropeway technology and impresses guests with a whole new level of comfort and performance.

Since the start of the current season, a Doppelmayr gondola lift of the latest ropeway generation, "D-Line", has been making a significant contribution to modernization of the Saalbach-Hinterglemm ski area. The Schönleiten lift is a key feeder and, with a capacity of 3,200 passengers an hour, has been instrumental in ensuring smoother passenger flows into the ski area and eliminating long waiting times for guests wishing to access the popular ski circuit. The predecessor lift in Saalbach-Jausem was taken out of service after 30 years in operation.

Powerful direct drive

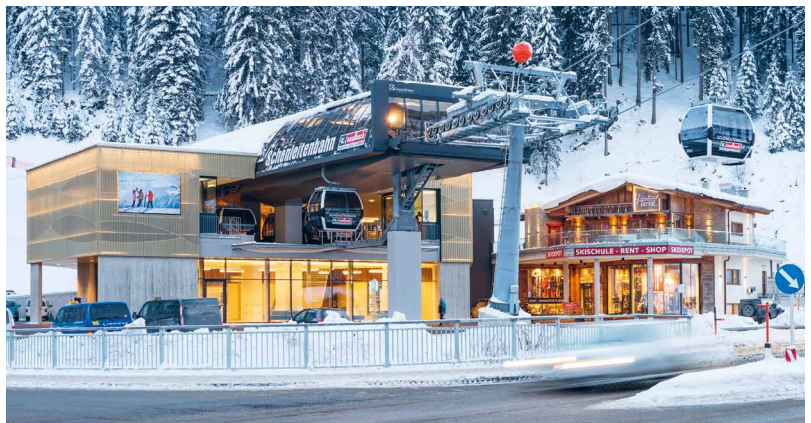
The Schönleiten lift has a powerful direct drive in each section. With an output of 945 kW each,

these drives rank among the most powerful that Doppelmayr has ever installed on a ropeway. "The gearless direct drive gives us many advantages. It's very energy-saving and low on noise, which is great news for our guests and the neighboring guesthouses as well as for our operating crew," says Walter Steiner, operations manager of Bergbahnen Saalbach-Hinterglemm. Passengers also enjoy top comfort during the trip. The new cabins offer more space plus well-upholstered seats. Cabins with standing room only, which were a feature of the previous lift, have become a thing of the past. The customer-oriented solution used for carrier parking has made it possible to integrate the entire mid station, along with its loop parking facility for all 105 cabins, into the natural landscape. | [f](#)



10-MGD Schönleiten Lift, Sections 1+2

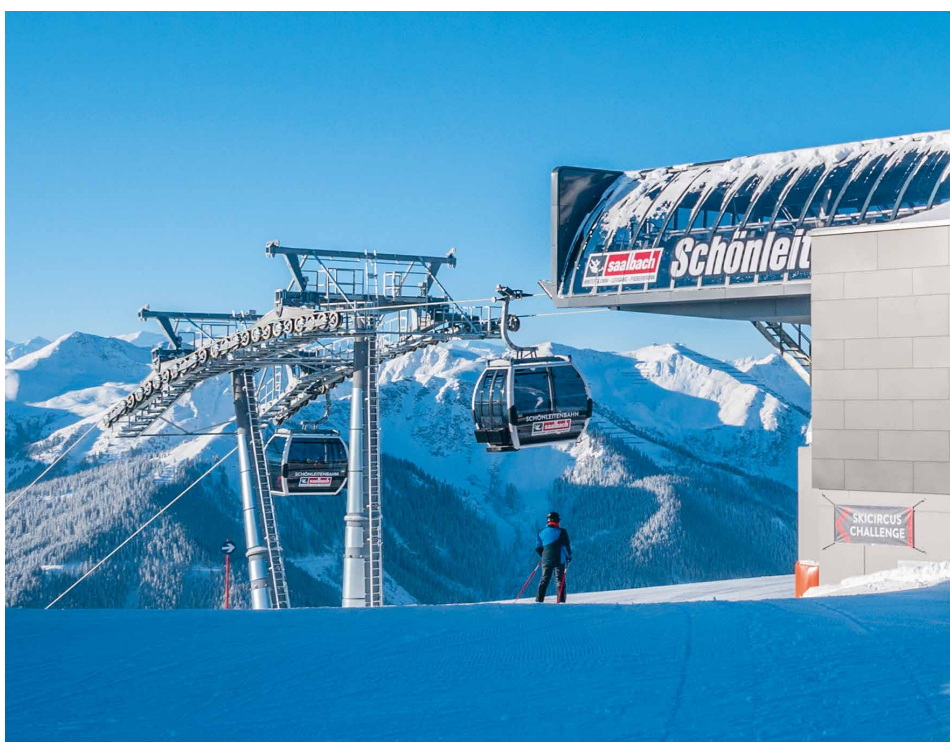
Owner	BBSH Bergbahnen Saalbach-Hinterglemm GmbH
Location	Saalbach, Salzburg (AUT)
Inclined length	1,569 m and 1,102 m
Vertical rise	549.0 m and 419.0 m
Capacity	3,200 PPH
Trip time	5.6 min and 4.3 min
Carriers	60 and 45 D-Line cabins



The generously proportioned bottom station has everything a skier's heart desires as well offering an architectural highlight thanks to its incorporation of wood and light.

Bottom line after first season: outstanding

WIR spoke with Walter Steiner, operations director of BBSH Bergbahnen Saalbach-Hinterglemm GmbH.



Bergbahnen Saalbach-Hinterglemm is presenting a new ropeway highlight this season: the Schönleiten lift. The two-section gondola lift from Doppelmayr's next-generation D-Line is equipped with two direct drives.

WIR. What was the deciding factor in awarding the contract for the new ropeway to Doppelmayr?

DI Walter Steiner: From our point of view, it was important to be able to offer the customer the utmost in quality. In addition to the ride comfort, we were particularly impressed by the new D-Line cabin in terms of the size and space it has to offer. That means you can achieve the very high theoretical capacity of 3,200 passengers an hour in practice.

WIR. When it comes to implementing a ropeway project, the collaboration between all the

companies involved is crucial. How would you describe the construction and installation of the Schönleiten lift?

DI Walter Steiner: The large construction volume of the three stations and the extensive demolition work in conjunction with the "old" lift meant we needed very precise scheduling in the preliminary stages. But, as with previous projects, the collaboration with Doppelmayr was outstanding. We were totally satisfied with the entire installation team. We never cease to be positively surprised by the perfect delivery logistics and the strict adherence to the schedule you get with Doppelmayr.

WIR. What has been your experience so far on the operations side with the D-Line lift and the Doppelmayr Direct Drive (DDD)? How have your guests responded to the new installation?

DI Walter Steiner: After our first season, I have to say that our experience with the DDD has been outstanding. The low noise level in particular is very much appreciated by our personnel and has also been rated very positively by our guests. The spaciousness and the low noise level of the ropeway are a measure of comfort that our guests regard as very positive.

WIR. Can you reveal to our readers what exciting highlights and innovations you already have planned for your guests?

DI Walter Steiner: The next major investment we have planned at Saalbach is the new Kohlmaisgipfel lift. This will be another 10-passenger gondola lift with two sections and a D-Line generation installation, just like the Schönleiten lift, and again with direct drive. 📌

Tailor-made ropeway and drive solution

Each ropeway is individual and unique. That's why there is no such thing as one drive from Doppelmayr/Garaventa that is always the best option. Customers of the Doppelmayr/Garaventa Group always get the best drive solution for their ropeway installation – tailored to their needs and perfectly in tune with local circumstances and the technical requirements.




Questions to aid selection of the right drive solution

- What kind of lift (ropeway system) will it be?
- What are its technical specifications (vertical rise, average gradient, etc.)?
- Where will the drive be located (e.g. in the village center, in the top station)?
- What are the location-related requirements (noise, environment, etc.)?
- How accessible is the drive station (by truck, possibility of using crane, etc.)?

The Doppelmayr/Garaventa Group is the ideal partner for implementing ropeway projects. It not only offers a choice of optimal ropeway systems, but also drive concepts that can be customized to suit individual needs. Various factors are decisive when it comes to choosing the right drive system: How steep will the ropeway be? What is the required drive power? How easily acces-

sible is the ropeway when work needs to be done on it? What are the surroundings like?

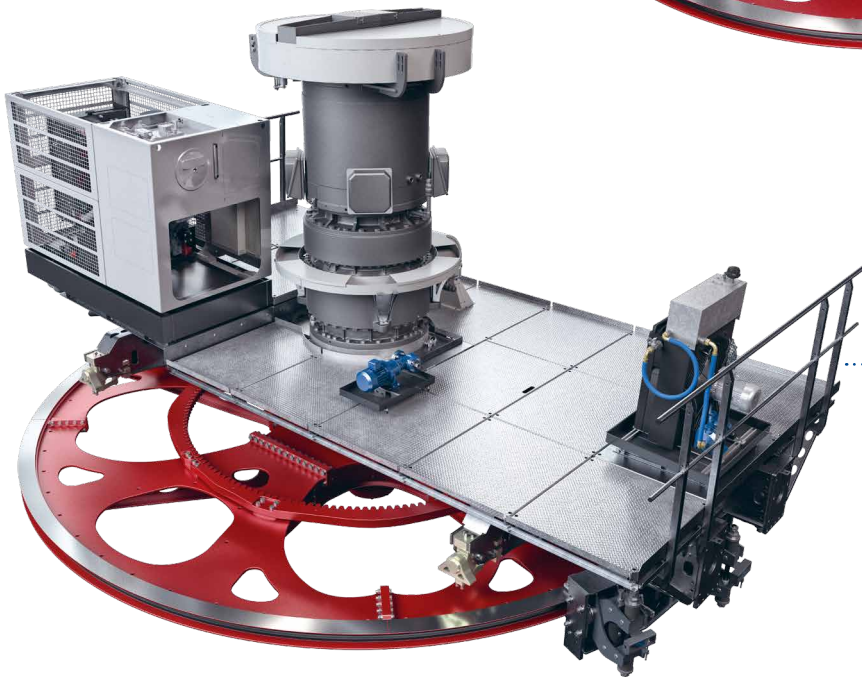
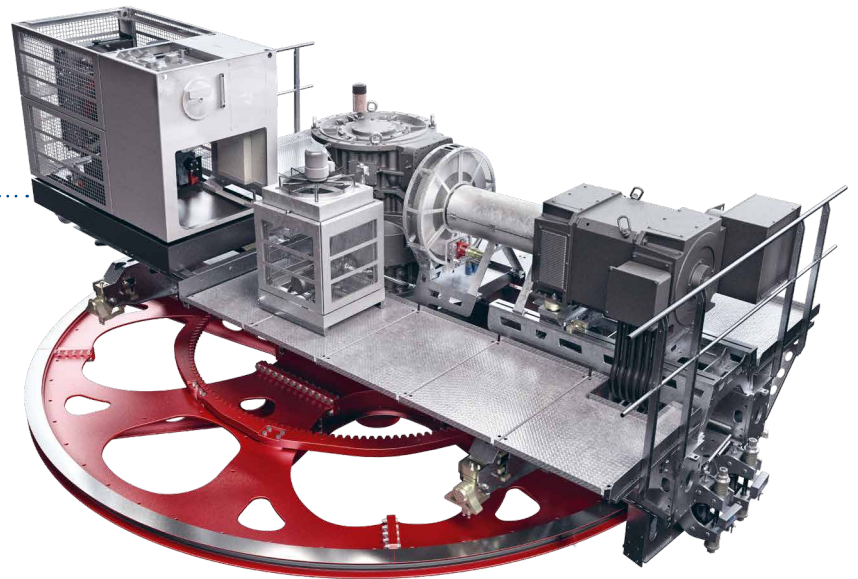
As well as meeting all the technical requirements, a ropeway from Doppelmayr/Garaventa ensures precise and elegant harmonization with the local situation. Everything is specifically planned and exactly tuned with requirements, the focus being on ecological and

economic efficiency. The benefits that the harmonious interaction of all the factors brings with it become particularly clear in practice. Whether it's an AC motor with gear unit, Doppelmayr Sector Drive (DSD) or Doppelmayr Direct Drive (DDD), the drive concepts all have their advantages and are customized to suit the customer's precise needs and wishes as well as the specific circumstances. 

 The best drive concept for each ropeway project

AC motor with gear unit

- Least expensive in terms of outlay
- Suitable for every ropeway geometry (even very steep installations)
- Straightforward installation and repairs, even in the case of ropeways with difficult access

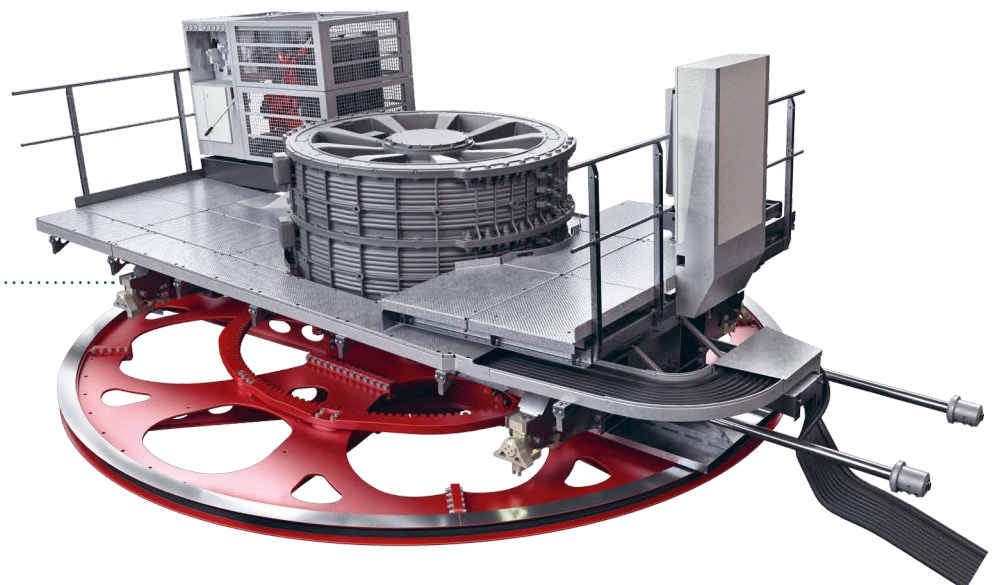


Doppelmayr Sector Drive (DSD)

- Very high efficiency
- Suitable for every ropeway geometry (even very steep installations)
- Limited operation possible without additional measures in the event of motor/converter failure

Doppelmayr Direct Drive (DDD)

- Exceptionally low noise emissions
- Exceptionally low maintenance requirement as there is no gear unit
- Very high efficiency





 More information on the Sweetwater Gondola can be found in the video

Perfection down to the last screw

The new Sweetwater 8-passenger gondola at the Jackson Hole ski resort impresses with outstanding design and a love of detail.

The Sweetwater 8-passenger gondola is the stunning new feeder lift that provides access to the Jackson Hole ski area in Wyoming (USA). It increases transport capacity and carries up to 2,000 guests an hour to the mid and top stations. The installation replaces two older chairlifts and services a new enhanced ski school facility in the lower section. The more advanced winter sports practitioners can reach other sectors on the mountain via the mid station. They also benefit from a huge increase in comfort: Guests no longer have to transfer from one lift to the other, as was previously necessary, but can now remain seated in the cabin and enjoy a fast trip into the heart of the ski area.

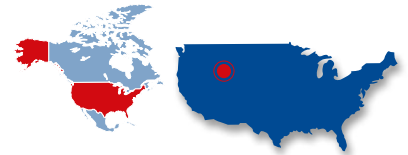
The comfortable CWA cabins and the attractive, curved lines of the top

station's architecture, echoing the design of the stations at the base, make the Sweetwater lift a real eye-catcher for regional guests and tourists alike. Despite the fact there was still snow on the ground at the start of construction in May 2016, Doppelmayr successfully completed the lift on schedule for the inauguration in November 2016. Sweetwater is the second Doppelmayr ropeway installation in Jackson Hole within two years: The Teton chairlift went into service in 2015.

Jackson Hole Mountain Resort and the Doppelmayr/Garaventa Group are linked by a long-standing partnership encompassing a string of successful ropeway projects: the popular Jackson Hole Aerial Tram (Big Red), several fixed-grip chairlifts and a detachable chairlift. The latest contract was awarded to Doppelmayr thanks to the company's many years of experience, its attention to detail and its reliability. 

"Sweetwater cannot fail to impress with its fantastic design – you can see that Doppelmayr has built this lift with a love of detail and an aspiration for perfection."

Jerry Blann, President of Jackson Hole Mountain Resort



8-MGD Sweetwater Gondola

Owner	Jackson Hole Mountain Resort
Location	Jackson, Wyoming (USA)
Inclined length	1,279 m
Vertical rise	390 m
Capacity	2,000 PPH
Speed	4.0 m/s
Carriers	48 cabins
Opened	November 2016

4-CLD Teton

Inclined length	1,240 m
Vertical rise	525 m
Capacity	2,223 PPH
Speed	5.1 m/s
Opened	Winter 2015/2016



More safety, more comfort, more guests



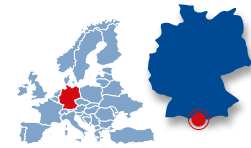
Visitors to Balderschwang can now enjoy the new Hochschelpen 6-seater chairlift.

The Balderschwang operating company has invested in a new chairlift and expansion of the snowmaking facilities at the winter sports resort. Doppelmayr took charge of the planning and

implementation of the new Hochschelpen 6-seater chairlift. It replaces a surface lift dating back to 1974. The new lift was built in six months using the alignment of its predecessor and can carry up to 2,000 passengers an hour. Guests can travel from the bottom to the top station in just over four minutes.

The new lift is part of a "ropeway program" of the Free State of Bavaria, which provided support for construction of the Hochschelpen lift and promotes further investment. Bavaria's state secretary for economic affairs, Franz Josef Pschierer, believes that modern lift installations not only bring safety and comfort, but ultimately mean benefits for local hotels and businesses as a result of the increased number of guests. | [↓](#)

"We're very excited about the new offer for our guests as it boosts the attractiveness of the region as a whole." | **Heinz Fischer, Managing Director of Bergbahn- u. Skilifte Balderschwang Betriebs GmbH & Co. KG**



6-CLD Hochschelpen

Owner	Bergbahn- u. Skilifte Balderschwang Betriebs GmbH & Co. KG
Location	Balderschwang, Bavaria (DEU)
Inclined length	1,142 m
Vertical rise	281 m
Capacity	2,000 PPH
Speed	5.0 m/s
Trip time	4.3 min
Carriers	47 6-seater chairs

Optimized ski resort link in Zermatt



The 6-seater chairlift, HUBLOT-EXPRESS, improves the connection between the Sunnegga-Rothorn and Gornergrat ski areas, and impresses with advanced technological design.

During the summer months of 2016, Zermatt Bergbahnen AG invested in the ski resort link between Sunnegga-Rothorn and Gornergrat. The elegant new 6-seater chairlift replaces an iconic gondola lift built in 1970. Unlike its predecessor, the new top station of the ultra-modern ropeway provides direct access to the ski trail. It relieves the Gant bottleneck and can carry up to 1,800 passengers an hour up to Blauherd. Even at the test operation stage, the Garaventa lift was already fulfilling all the requirements to the total satisfaction of the

operating company. The chairs with lockable restraining bar and individual footrests, which are ideal for children, also feature high backrests. This means a major increase in comfort for the guests. The HUBLOT-EXPRESS takes its name from the Swiss watchmaker and long-time partner of Zermatt Bergbahnen AG. | [↓](#)

Did you know that ...

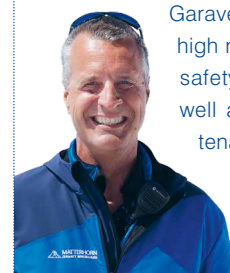
... all the old cabins from the old Gant-Blauherd lift were sold off to enthusiasts within five days? The rescue cabin was the prize in a competition that ran during the winter season.



6-CLD HUBLOT-EXPRESS (Gant-Blauherd)

Owner	Zermatt Bergbahnen AG
Location	Zermatt, Valais (CHE)
Inclined length	954 m
Vertical rise	378 m
Capacity	1,800 PPH
Speed	5.0 m/s
Trip time	3.5 min
Carriers	36 6-seater chairs
Opened	November 25, 2016

"The detachable chairlift from Garaventa optimally meets our high requirements in terms of safety and ride comfort as well as operation and maintenance."



Markus Hasler,
CEO of Zermatt
Bergbahnen AG

Attractive access to the biggest skiing and hiking region in Slovakia



15-MGD Krupová-Kosodrevina


Owner	Tatry mountain resorts, a.s.
Location	Jasná-Chopok juh, Brezno (SVK)
Inclined length	1,212 m
Vertical rise	404 m
Capacity	2,800 PPH
Speed	6.0 m/s
Carriers	30 cabins, 15 passengers each (10 seated/5 standing)
Opened	December 2016

The new 15-passenger gondola lift Krupová-Kosodrevina once again brings enhanced comfort, design and capacity to Jasná-Chopok juh in the Low Tatra Mountains.

There are several reasons that explain why the new all-year Krupová-Kosodrevina lift in Slovakia's biggest skiing and hiking region is once again a 15-passenger gondola lift from Doppelmayr. The operating company – Tatry mountain resorts, a.s., which is by far the biggest in the region – has already enjoyed great success with this ropeway system and the cabins that were originally developed as a custom design especially for this customer. The elegant carriers with room for ten seated and five standing passengers offer flexible use and ensure maximum comfort, high wind stability and greater transport capacity. Wheelchairs, walking aids or baby strollers can be carried without any problem, without having to fold up the seats or significantly reduce speed. Since 2012, Doppelmayr has already built two other installations with TMR, a.s., which also incorporate the comfortable Omega IV-15 SI cabins from CWA: Kosodrevina-Chopok and Štart-Skalnaté pleso.

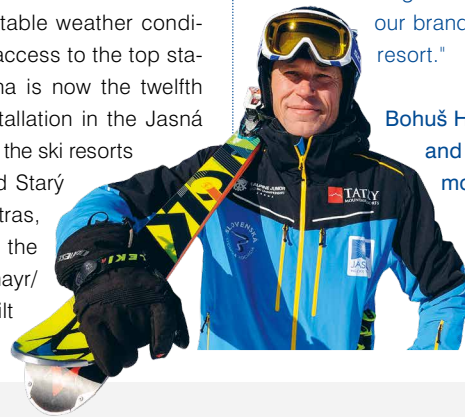
The Krupová-Kosodrevina gondola lift – the bottom section of the ropeway connection up to Mount Chopok from the southern side – crosses two surface lifts and a chairlift. The top station, which is 20 m tall in parts, is accommodated in a steel structure built directly into the steep mountainside. A twelve-meter-high basement and solid retaining walls allow a large, level station area. This also houses the semi-auto-

matic carrier parking facility along with an additional parking rail.

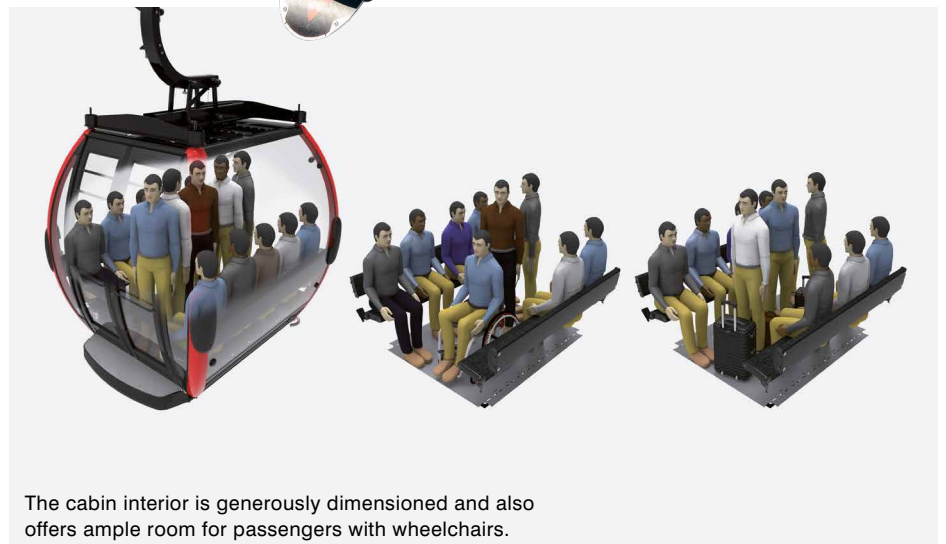
Thanks to the excellent, long-standing and well-established collaboration with the customer, the Doppelmayr team successfully completed the new installation in time for the 2016/17 winter season despite unpredictable weather conditions and very restricted access to the top station. Krupová-Kosodrevina is now the twelfth Doppelmayr ropeway installation in the Jasná skiing and hiking region. In the ski resorts of Tatranská Lomnica and Starý Smokovec in the High Tatras, which are also owned by the TMR Group, the Doppelmayr/Garaventa Group has built another seven lifts. 

"The system solution that was originally custom-designed for us has optimally fulfilled all our requirements up to now. We're proud to see such a positive response to our new lift from all sides. It marks an important building block toward establishing our brand as a top international resort."

Bohuš Hlavatý, CEO and Chairman of Tatry mountain resorts, a.s.



© Marek Hajkovsky



The cabin interior is generously dimensioned and also offers ample room for passengers with wheelchairs.

Riding on a wave of success since the Winter Olympics



6-CLD-B Edelweiß

Owner	OOO Ober Khutor
Location	Krasnaya Polyana (RUS)
Inclined length	2,658 m
Vertical rise	841 m
Capacity	2,400 PPH
Carriers	124 6-seater chairs with bubbles
Speed	5.0 m/s
Trip time	9.3 min

8-MGD Driada

Owner	OOO Ober Khutor
Location	Krasnaya Polyana (RUS)
Inclined length	2,145 m
Vertical rise	688 m
Capacity	2,800 PPH
Carriers	79 8-passenger cabins
Speed	6.0 m/s
Trip time	6.8 min


8-MGD Tundra

Owner	OOO Ober Khutor
Location	Krasnaya Polyana (RUS)
Inclined length	1,533 m
Vertical rise	575 m
Capacity	2,400 PPH
Carriers	51 8-passenger cabins
Speed	6.0 m/s
Trip time	5.1 min

Since the Winter Olympic Games in 2014, Rosa Khutor has seen a continuous increase in capacity utilization. With almost two million guests a year, the ski resort is enjoying greater success than ever. As a result, additional capacity had to be created.

Rosa Khutor is an all-year skiing and recreation area in the Western Caucasus. During the 2014 Winter Olympics in Sochi, all the alpine skiing events were held here. With three new detachable ropeways from Doppelmayr, Rosa Khutor has improved comfort for its guests and reduced waiting times. Since 2016, two 8-passenger gondola lifts and a 6-seater chairlift with bubbles have provided access to additional ski trails in Ober Khutor and ensure an even more enjoyable and varied skiing and leisure experience. They

offer guests a fast and convenient means of reaching the downhill runs. Another detachable 6-seater chairlift with bubbles has been ordered for winter 2017/18.

The new installations from Doppelmayr are part of a long-term development plan for Rosa Khutor. The resort attracts some 10,500 guests on a daily basis – the new ropeways relieve bottlenecks and provide a further quality boost. Installing the ropeways in the heart of a high mountain region was a challenge, but Doppelmayr nevertheless succeeded in completing the installations on schedule in December 2016. Doppelmayr Russia was heavily involved with the implementation – particularly with site management and creating the project documentation. | 



"Doppelmayr has already demonstrated its great expertise in Sochi. That's why we have again entrusted the world market leader with our new ropeways."


Petr A. Kozlov, Vice Director of Rosa Khutor

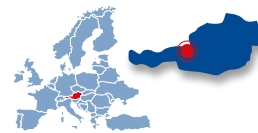
New chairlift completed in record time



The new Schmiedinger lift on the Kitzsteinhorn, which went into service just ten months after the idea was first put forward, is the highest chairlift in the province of Salzburg.

Since the 2016/17 winter season, the new 8-seater chairlift on the Kitzsteinhorn has been carrying around 3,000 guests an hour to an elevation of 2,775 m, where they can look forward to abundant snow and a choice of many glacier ski trails. The Schmiedinger lift is the highest chairlift in Salzburg and was completed in record time despite the high alpine conditions. The planning

approval process, the building construction and civil engineering works plus the complete installation and commissioning were carried out within a period of just ten months. This called for outstanding collaboration between all the companies involved in the construction and the relevant authorities. In addition to a compact top station and a bottom station with integrated carrier parking, the chairlift is equipped with a Doppelmayr Sector Drive (DSD) for quiet, low-maintenance operation. The new comfort suspension for the chairs along with the bubbles ensures a top ride experience. | 



8-CLD-B Schmiedinger lift

Owner	Gletscherbahnen Kaprun AG
Location	Kaprun, Salzburg (AUT)
Inclined length	721 m
Vertical rise	240 m
Capacity	2,900 PPH
Speed	5.0 m/s
Trip time	2.8 min
Carriers	34 8-seater chairs

"Thanks to the new Schmiedinger lift we can offer our guests more skiable terrain and top comfort, even in the high alpine sector."

Norbert Karlsböck,
CEO, Gletscherbahnen
Kaprun AG



Expansion of Switzerland's biggest ski region



The 10-passenger gondola lift for the Piste de l'Ours, which has seen so many World Cup competitions, and a surface lift on Inalpe are part of a comprehensive investment program for the 4 Vallées ski region.

Following in the footsteps of the strong modernization drive over the past three years, the new 10-passenger gondola lift Mayen de l'Hôpital-Piste de l'Ours-Thyon was the logical next step toward optimization of the biggest ski region in Switzerland, 4 Vallées. The ropeway can bring up to 1,500 passengers an hour from Veyonnaz to the start of the popular and legendary "Bear" ski run, where some 30 Ski World Cup races have been held to date. The new installation offers top comfort as well as high capacity. In addition to the gondola lift, Doppelmayr/Garaventa installed a new surface lift on Inalpe, which carries over 800 passengers an hour. Further investments by the ski region include expansion of its snowmaking facilities. Hospitality projects and more ropeways are also planned. | 



"With the new lift installations and snowmaking facilities we are taking the attractiveness of the destination to a whole new level. Our guests will benefit from optimal conditions."

François Fournier,
Director of NV Remontées
mécaniques SA



10-MGD Mayen de l'Hôpital-Piste de l'Ours-Thyon

Owner	NV Remontées mécaniques SA
Location	Veyonnaz, Valais (CHE)
Inclined length	2,019 m
Vertical rise	651 m
Capacity	1,500 PPH
Speed	6.0 m/s
Trip time	8.0 min
Carriers	39 10-passenger cabins

1-SL Inalpe

Owner	NV Remontées mécaniques SA
Location	Veyonnaz, Valais (CHE)
Inclined length	447 m
Vertical rise	92 m
Capacity	837 PPH
Speed	2.5 m/s
Trip time	3.0 min
Towing units	85 T-bars



New highlights in Pinzgau

A new D-Line gondola lift and a double surface lift enhance the attractiveness of the Saalbach-Hinterglemm ski region.

In Hinterglemm, the ski experience begins in the heart of the village. From here, guests have direct access from the ski school meeting point to other lifts in the ski region with the new 12er Express lift, which is just 210 meters in length. The 10-passenger gondola lift is a huge benefit in terms of comfort and safety for ski school children as they no longer have to walk a good 500 meters. Access to the bottom stations for the Westgipfel and Zwölferkogel mountains in Hinterglemm is now much more convenient thanks to the new 10-passen-

ger gondola lift. Up to now, winter sports guests had to carry their skis on their shoulders and cross the road on foot when transferring from one mountain to the other. In the 12er Express, the motto is: "Welcome to first class". Individual seats and the twist-in system for transporting skis inside the cabins ensure stress-free travel. Peter Mitterer and Hans Georg Bachmann, the joint managing directors of Hinterglemm Bergbahnen GmbH, commented as follows: "As the lift runs directly through the village, noise protection and the efficient use of space were a top priority for this project. The direct drive in the top station and a special rope meet these requirements to a tee."



10-MGD 12er Express

Owner	Hinterglemm Bergbahnen GmbH
Location	Hinterglemm, Salzburg (AUT)
Inclined length	210 m
Vertical rise	27 m
Capacity	2,400 PPH
Speed	4.0 m/s
Carriers	5 10-passenger cabins

1-SL Oberschwarzachlift 1+2


Owner	Hinterglemm Bergbahnen GmbH
Location	Hinterglemm, Salzburg (AUT)
Inclined length	231 m
Vertical rise	44 m
Capacity	2 x 635 PPH
Speed	2.4 m/s
Towing units	2 x 40 platters

PERFORMA-DT from Fatzer



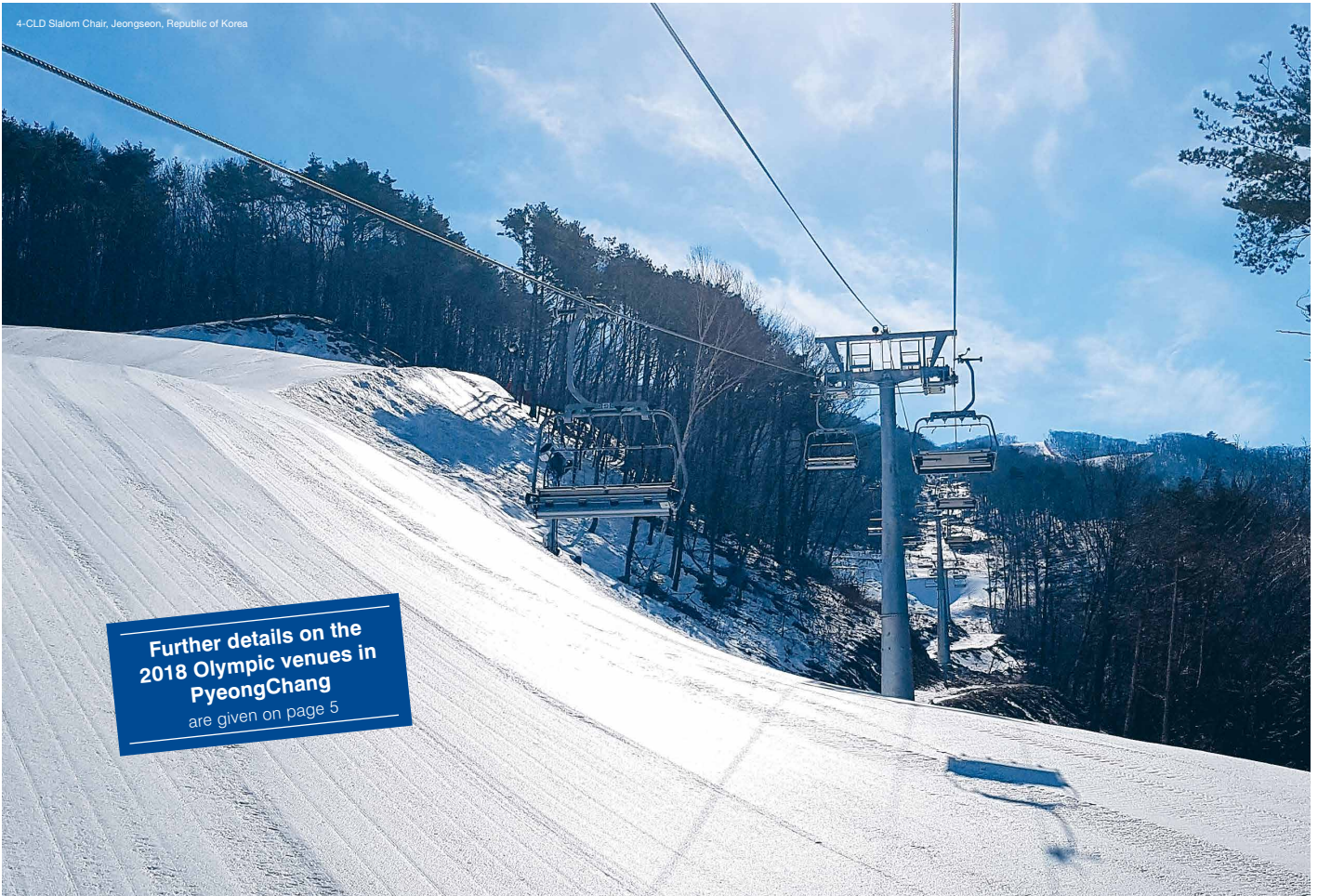
The Performa technology was developed with the aim of eliminating strand-induced vibration in hauling and hoisting operations. For this purpose, plastic profiles are incorporated between the strands. These fill the surrounding circular area almost completely, separating the strands from one another and stabilizing them in position. As a result of its smooth surface structure, the rope runs practically without vibration and noiselessly across bull-wheels and sheaves, which also has a positive effect on service life.

Double surface lift

The Oberschwarzach lift was converted into a double surface lift for the 2016/2017 winter season. The major new feature here is the double tower. Two surface lifts that run parallel to one another now use just one double tower, which saves space and enables better management of the hay meadow. This makes the Oberschwarzach lift unique and a highlight for children and users of the practice slopes. CCTV monitoring in the bottom station means that two passengers can use the two platter lifts at the same time. | 



"With the direct drive and the special rope, the 12er Express meets our requirements for noise protection and efficient space utilization down to a tee." | **Peter Mitterer (left) and Hans Georg Bachmann (right), Joint Managing Directors, Hinterglemm Bergbahnen GmbH**



Further details on the 2018 Olympic venues in PyeongChang are given on page 5

64 lifts in 32 years: Doppelmayr in the Republic of Korea

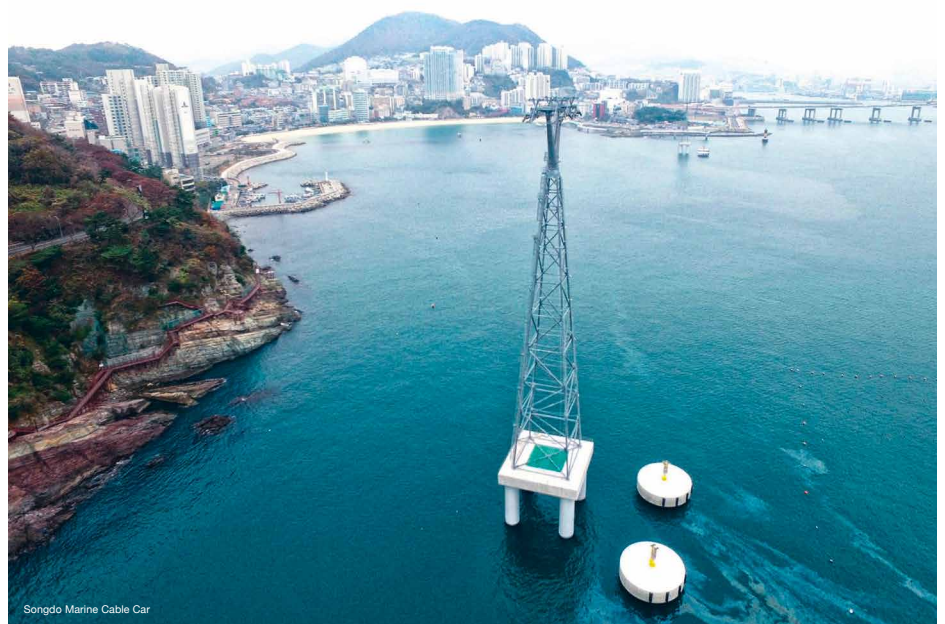
A long-standing partnership connects Doppelmayr with South Korea, where the Pyeongchang Winter Olympics will be taking place in 2018.

South Korea is a very popular tourist destination in Asia. As ropeways are a major attraction and contribute a great deal to development of the regions, Doppelmayr plays a key role in the implementation of infrastructure and tourism projects in the country. Since first entering the market in 1985, the Austrian ropeway manufacturer has built a total of 64 installations – three of which are currently still under construction. Ropeway expertise is not the only thing that Doppelmayr supplies. Customers value above all the advice provided, which is a crucial factor in the successful implementation and operation of an attractive tourism or infrastructure installation.

Doppelmayr is a major partner for the 2018 Winter Olympic Games in Pyeongchang, where Doppelmayr ropeways will be bringing guests, athletes and their teams to the slopes at four different venues. The Doppelmayr gondola lift in Jeongseon, where the alpine events as well as the super-G will be taking place, was completed on schedule for the first FIS World Cup race in February 2016.

Winter tourism is not the only area where Doppelmayr ropeways are an important factor in South Korea: They are also hugely popular in summer tourism applications. The latest example is the Songdo Marine Cable Car project currently under construction in Korea's second-largest city,

Busan. The special feature of this lift is that it is the first Doppelmayr ropeway in Korea that is to be built over the sea – two of its towers actually stand in the water. The popular coastal destination for vacationers can look forward to adding another tourist attraction to its offer. | 1




Songdo Marine Cable Car



Olympia lift goes into service on the Ifen

The operating company, Skiliftgesellschaft links der Breitach, presents the first part of its quality drive: the modern Olympia lift in Kleinwalsertal plus a snowmaking installation for enhanced snow reliability.

The Hoher Ifen in Kleinwalsertal is a landscape highlight in Europe and equally popular with winter sports enthusiasts and hikers. A new Doppelmayr ropeway has provided access to the mountain since December 2016. The Olympia lift in Kleinwalsertal carries 2,000 passengers an hour to the popular Olympia slope in top comfort – and at 6 m/s, currently ranks as the fastest chairlift in the province of

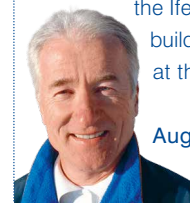
Vorarlberg. The new Olympia lift is equipped with bubbles, seat heating and child-friendly restraining bars. It replaces a surface lift between Ifenhütte and the top station, and provides another route to the ski area from the base. A new storage pond and snowmaking installation with a capacity of 100,000 m³ ensure optimal skiing conditions. In addition, the operating company is also building more lifts on the Ifen itself as part of the quality drive. Two 10-passenger gondola lifts belonging to the new D-Line generation are set to replace the Ifen and Hahnenköpfe lifts, with construction scheduled to start in spring 2017 once the snow has melted. | 



6-CLD-B Olympia Lift Kleinwalsertal

Owner	Skiliftgesellschaft links der Breitach
Location	Mittelberg, Vorarlberg (AUT)
Inclined length	1,890 m
Vertical rise	586 m
Capacity	2,000 PPH
Speed	6.0 m/s
Trip time	5.7 min
Carriers	63 6-seater chairs with bubbles and seat heating

"Having the opportunity to replace all the lifts in the ski area and to build a panorama restaurant in addition is quite unique in this form. It's a flagship project in Vorarlberg and the Allgäu. The snowmaking installation and the new Olympia lift were built as the first step. Next summer, we'll be upgrading the Ifen and Hahnenköpfe lifts and building the panorama restaurant at the top station."



Augustin Kröll, Managing Director, Skiliftgesellschaft links der Breitach

A customized transport concept



6-CLD-B Arnouva–Cry d'Er




10-MGD Montana–Arnouva

Two new ropeways in the Swiss canton of Valais create an attractive all-weather connection between the destinations of Montana, Arnouva and Cry d'Er.

The Crans Montana ski area has turned its previous transport concept upside down and tailored it to suit the needs of today's guests. Two new Doppelmayr/Garaventa ropeways, a 6-seater chairlift and a 10-passenger gondola lift, guarantee an all-weather connection between the district of Montana, the popular destination of Arnouva and the winter sports resort of Cry d'Er higher up. Up to now, guests used an older 6-seater gondola lift to reach the ski area from the village. With the new 10-passenger gondola lift Montana–Arnouva, around 1,600 passengers an hour can now travel from the village center in Montana to Arnouva – and even into the evening hours, which means that guests have a convenient means of getting back to the village after a day out. In view of the short route of 550 meters, which the lift covers in

just 2.5 minutes, the cabins are designed with standing room.

From the Arnouva mid station, the new 6-seater chairlift Arnouva–Cry d'Er carries up to 2,400 guests an hour to the Cry d'Er snow sports resort 533 meters higher up. All 94 chairs are fitted with bubbles, which protect the passengers against wind and weather. The new parallel loading at the bottom station provides separate loading and unloading for winter sports practitioners and foot passengers. This makes the lift equally attractive for passengers traveling without skis or snowboard. 



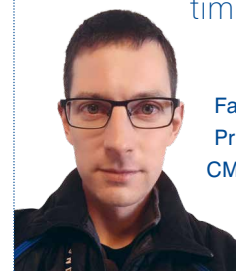
6-CLD-B Arnouva–Cry d'Er

Owner	CMA SA Remontées mécaniques Crans- Montana Aminona SA
Location	Crans-Montana, Valais (CHE)
Inclined length	1,835 m
Vertical rise	533 m
Capacity	2,400 PPH
Speed	5.0 m/s
Trip time	7.0 min
Carriers	94 6-seater chairs with bubbles
Opened	December 21, 2016

10-MGD Montana–Arnouva

Owner	CMA SA Remontées mécaniques Crans- Montana Aminona SA
Location	Crans-Montana, Valais (CHE)
Inclined length	554 m
Vertical rise	188 m
Capacity	1,600 PPH
Speed	6.0 m/s
Trip time	2.5 min
Carriers	15 10-passenger cabins
Opened	December 6, 2016

"Garaventa was able to design and build ropeways for us, which were entirely tailored to our requirements in terms of technology and operation. They also completed the installations on schedule despite extreme time pressure."



Fabrice Mauron,
Project Manager,
CMA SA Remontées
mécaniques
Crans-Montana
Aminona SA



First line opens in Phase II of the world's biggest urban ropeway network

The Línea Azul in El Alto marks another milestone for Bolivia's infrastructure. This latest route also connects the Public University of El Alto (UPEA) to the ropeway network.

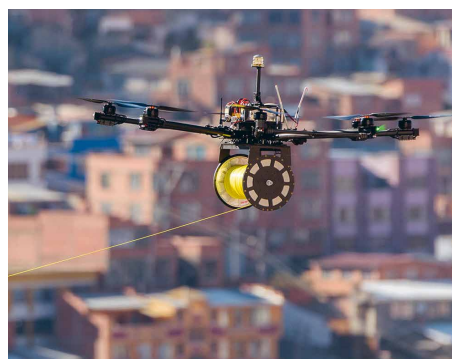
Following in the footsteps of the three ropeway lines which have linked the Bolivian cities of La Paz and El Alto since 2014, the opening of the Línea Azul (blue line) in March 2017 heralds the second phase in the creation of what is to



"Thanks go to the Austrian company Doppelmayr – a good ally and a good investment!" | Bolivia's President Evo Morales was visibly impressed after completing the maiden trip.

date the biggest urban ropeway network worldwide. The new blue line lies entirely in El Alto and is directly linked to the existing Línea Roja (red line). This means that additional districts of El Alto are now connected with La Paz. The Línea Azul extends the public ropeway network by almost five kilometers and includes five new stations. The through travel system enables passengers to ride along the entire stretch from the first to the last station without having to change along the way. The route crosses

the biggest street market in Latin America as well as linking UPEA to the ropeway network, making it a key means of public transport for the citizens of El Alto and La Paz.

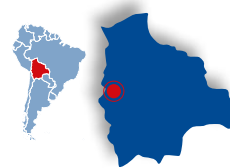


Drone used for rope installation

A special method was used to install the rope for both sections of the new line: Two Vorarlberg pilots steered the drone, which was specially developed for Doppelmayr and carried an auxiliary rope to the required destination. The auxiliary rope was then used by the ropeway specialists from Doppelmayr/Garaventa to install the actual rope for the lift. The drone employed is known as an octocopter: If one of its motors should fail, the other seven motors allow the drone to be flown without any problem. Thanks to its compact size and flexible use, a drone is particularly well suited to deployments in urban areas. 🇇🇪



➔ Information video on the Línea Azul can be viewed here:



10-MGD Línea Azul Sección 1

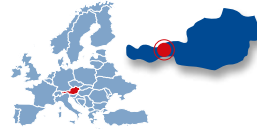
Owner	Mi Teleférico
Location	El Alto (BOL)
Inclined length	3,170 m
Vertical rise	-40 m
Capacity	3,000 PPH
Carriers	136 10-passenger cabins
Speed	5.0 m/s
Trip time	13.62 min

10-MGD Línea Azul Sección 2

Owner	Mi Teleférico
Location	El Alto (BOL)
Inclined length	1,723 m
Vertical rise	-21 m
Capacity	3,000 PPH
Carriers	72 10-passenger cabins
Speed	5.0 m/s
Trip time	7.17 min



D-Line for Innsbruck's local mountain



A new-generation gondola lift is to be built on Patscherkofel Mountain above Innsbruck.

Patscherkofel Mountain has long been close to the hearts of winter sports enthusiasts – even before Franz Klammer's legendary Olympic victory in 1976. The mountain that rises above Tyrol's capital, Innsbruck, has in fact been a popular destination for tourists and local residents alike for many decades. This explains the great excitement about the new Patscherkofel lift. As Doppelmayr won the Europe-wide call to tender, the operating company is now looking forward to the opening of a gondola lift belonging to the new D-Line product generation. It will have two sections and be able to carry up to 2,450 passengers per hour and direction.



Raimund Baumgartner (CEO, CWA Constructions SA/Corp.), Mayor Christine Oppitz-Plörer, Patscherkofelbahnen MD Martin Baltés and Andreas Natter (Doppelmayr Sales)

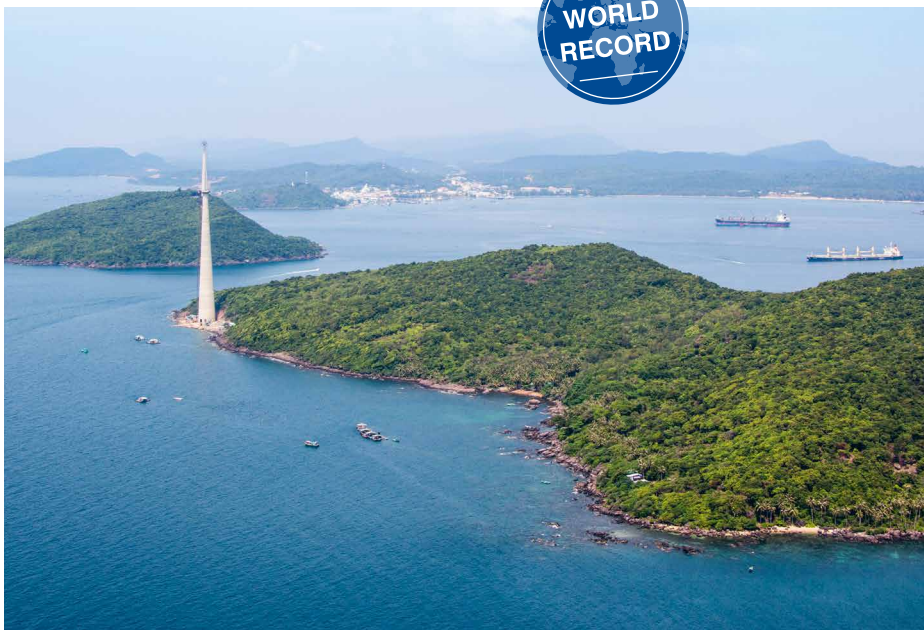
Parts already in production

The new ropeway is scheduled to go into service in the 2017/2018 winter season. Preparations along the projected ropeline were completed in fall 2016 and production of the equipment started in December 2016. The

alignment includes a bottom, mid and top station, with a total vertical rise of 956 meters. The dismantling of the Olympia Express chairlift and the Ochsenalm surface lift will go

ahead from the end of March 2017. The new Patscherkofel lift will replace both of these installations as well as the old reversible tramway, and will serve all the existing ski trails. [↓](#)

Work in full swing on the world's longest ropeway



longest single-section ropeway is part of the project and will in future link the vacation islands of Phú Quốc and Hòn Thơm, which are already popular destinations for tourists. Traveling there on the almost eight-kilometer-long 3S gondola lift will already be an experience, offering a breathtaking all-round view of the turquoise-colored sea and the islands.

Five of the six towers for the new ropeway are now in place, the tallest of which will rise up 160 meters. The return and drive stations are currently under construction. The comfortable CWA cabins each provide room for 30 passengers, and passenger safety is also guaranteed in an evacuation scenario thanks to the recovery concept developed by Doppelmayr. Sun Group Corporation has worked with Doppelmayr for many years. In addition to the 3S lift in Hòn Thơm, a contract was awarded for another two detachable gondola lifts.

In Vietnam, Sun Group Corporation and Doppelmayr are jointly building the world's longest single-section ropeway.

A vacation hotspot offering a wide range of leisure activities and accommodation is currently being created in Southern Vietnam. The world's

Doppelmayr laid the foundation for the world-record ropeway installation back in September 2015. [↓](#)

First Cable Liner in Russia

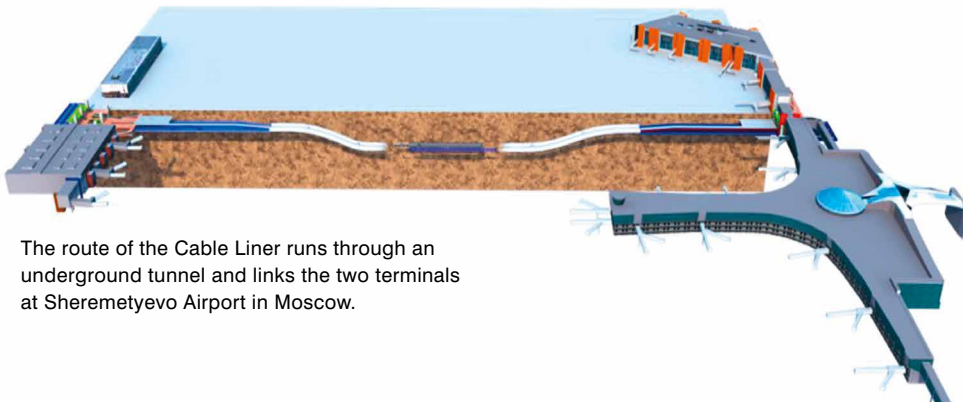


While the usual busy flight operations continue above ground at Sheremetyevo International Airport, Doppelmayr is working on the construction of Russia's first Cable Liner below.

Russia's first rope-propelled APM (Automated People Mover System) is being built by Doppelmayr Cable Car (DCC). In future, two independent

and fully redundant Cable Liner Shuttles will connect the international terminal in the south with the domestic terminal in the north at Moscow's Sheremetyevo Airport – running in a tunnel over the entire route below the apron and two landing runways. All the construction work is being carried out while Moscow's airport remains fully operational.

The mechanical ropeway equipment was manufactured by Doppelmayr Italia and has already been shipped, with the electrical components due to follow in March 2017. The vehicles, which will feature specially adapted contours, are to be completed at Carvatech at the end of April. The on-site installation work is due for completion by September. This will be followed by the commissioning of the system and training for the operating crew in Moscow. DCC is to operate the system for 15 years. The final handover is planned for January 2018 – in time for the start of the FIFA World Cup in Russia in June 2018. | [1](#)



The route of the Cable Liner runs through an underground tunnel and links the two terminals at Sheremetyevo Airport in Moscow.

The latest from Germany's highest building site



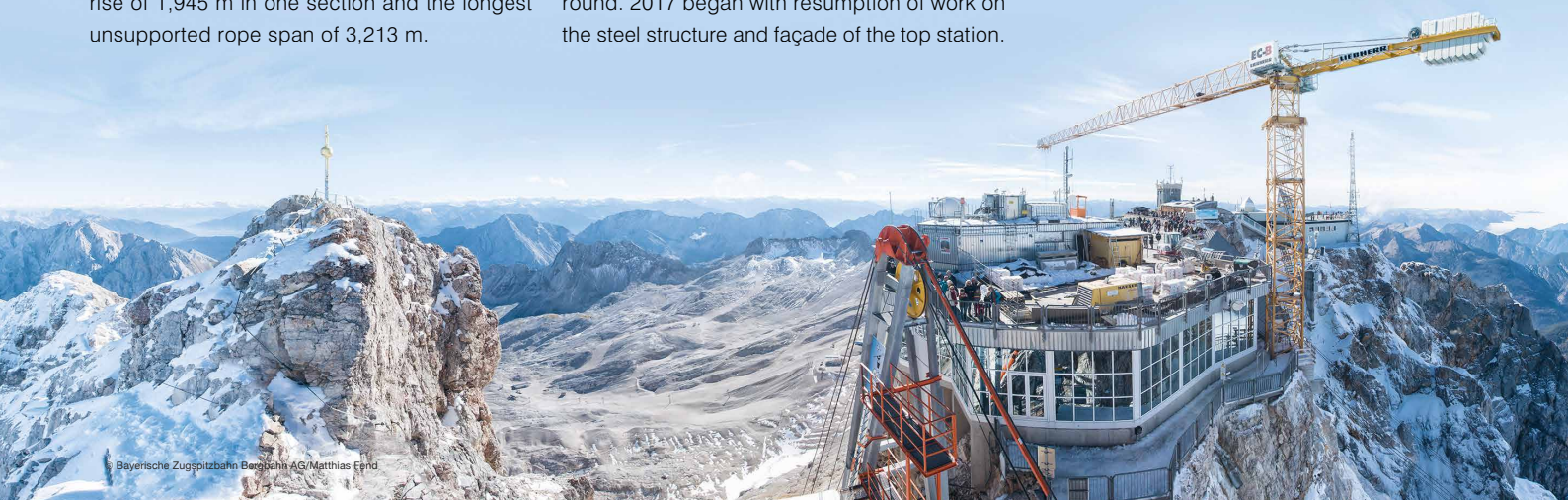
The construction work on the new reversible aerial tramway on the Zugspitze is making excellent progress. The ropeway is set to break several records.

For over 50 years, visitors have taken the Eibsee tram to reach Germany's highest peak, the Zugspitze. That is set to change from December 2017 with the new all-year Zugspitze tram. Its basic specifications alone are enough to make people sit up and take notice: The operating company, BAYERISCHE ZUGSPITZBAHN Bergbahn AG, is presenting the world's highest lattice tower at 127 m, the greatest overall vertical rise of 1,945 m in one section and the longest unsupported rope span of 3,213 m.

The erection of the construction crane at an elevation of 2,950 m – Germany's "highest construction crane" – was the first milestone in the tramway construction project. This enabled the work on the top station to begin. 2016 was a very work-intensive year. The foundation work for the record tower, the start of construction on the bottom station, the installation of the ropeway equipment and the presentation of the new cabin designs were just some of the highlights. Weather conditions on the 3,000-meter peak proved to be a particular challenge: Snow shovels, excavators and snow blowers have shown themselves to be important tools all year round. 2017 began with resumption of work on the steel structure and façade of the top station.

Now the project has reached the home stretch: In April 2017, the old tramway along with the entrance buildings will be taken out of service, dismantled and the new tower erected. The Zugspitze will remain accessible during the work from May through December 2017 thanks to the rack-and-pinion railway and glacier lift. Test operation is due to start in November of this year. | [1](#)

➤ Take a look at the construction work on the Zugspitze tram during the second half of 2016:



Competence center in the east: Doppelmayr Russia

Doppelmayr has been successful in the Russian market for 20 years thanks to long-term partnerships and the concentration of expertise at a local level.



Doppelmayr's activities in the world's largest country span two decades. Subsidiaries were founded there in 2013 and 2014. Doppelmayr Russia offers something that other ropeway suppliers don't have: Its local experts not only have the project engineering capability for ropeways, they can also deliver turnkey installations to the highest quality standards when required.



The Doppelmayr Russia customer support team in Adler/Sochi

Doppelmayr Russia has a USP in Russia, which sets it apart from international competitors. The competence center for ropeway construction, with subsidiaries in Sochi and Samara, is fully autonomous thanks to its local team. A series of top-quality ropeway installations implemented entirely by Doppelmayr prove the company's wealth of experience. But how did this come about?



The Doppelmayr Russia team in Samara

After twenty instructive and successful years in the Russian market, Doppelmayr set up its first subsidiary in 2013. A customer support center was opened in Sochi in conjunction with the Winter Olympic Games. A wholly owned subsidiary followed in October 2014 and was established in Samara on the River Volga. In order to be able to offer customers optimal service, Doppelmayr Russia employs specially trained people at both sites as well as working with partners who possess many years of experience.

distances involved often pose major challenges in terms of logistics, which is why material transports have to be planned prudently and well in advance.

Cable Liner, and IKEA in Moscow, where they are providing support for a project from LTW Intralogistics*. | 1

Mastering challenges in record time

In recent years, in particular, Doppelmayr Russia has been able to complete many challenging large-scale projects in Russia and the CIS. In 2016, the ropeway experts completed turnkey installations in Sakhalin and Krasnaya Polyana in record time. The country's vast area and the

2016 was a particularly successful year for Doppelmayr Russia. In Georgia alone, the specialists were responsible for the installation and start-up of no less than six ropeways. The Doppelmayr/Garaventa Group's first ropeway in Tajikistan was also successfully handed over to the customer. The outlook for 2017 again points to success in Russia. A large number of installations are currently under construction. Examples include Sheremetyevo Airport in Moscow, where Doppelmayr Russia is currently in charge of the construction site for the new

"Our two sites enable us to provide our customers in the CIS with intensive and all-round service – irrespective of whether it's a tourism installation or an urban ropeway that's involved."
Alexander Klimmer, Executive Director of Sales, Doppelmayr Seilbahnen GmbH

* LTW Intralogistics is a company belonging to the Doppelmayr Group and develops, manufactures and installs turnkey intralogistics systems worldwide as a single-source supplier and general contractor.

Milestones:

<p>2013</p>  <p>Foundation of Doppelmayr Russia in Sochi in conjunction with the Winter Olympic Games (wholly owned Doppelmayr subsidiary, purely as customer support operation)</p>	<p>2014</p>  <p>Foundation of Doppelmayr Russia in Samara (wholly owned Doppelmayr subsidiary)</p> <p>Doppelmayr/Garaventa builds a total of 40 ropeways in the ski areas around Krasnaya Polyana near Sochi.</p>	<p>2015</p>  <p>Customer support team in Sochi launches training program in Russian</p>  <p>DCC wins contract for a Cable Liner at Sheremetyevo Airport in Moscow</p>	<p>2016</p>  <p>Eleven projects successfully completed in the CIS within one year, including three turnkey projects</p> <p>First Doppelmayr ropeway in Tajikistan</p>
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More about the Sheremetyevo Cable Liner
 can be found on page 25

Service standards in the Champions League

The safety and availability of a ropeway installation are an absolute must throughout its operational lifetime. This is where the quality of the service work plays a decisive role. The fact that Doppelmayr is a Champions League player at international and industry level when it comes to safety standards is something that the company was recently able to put to the test when carrying out service work on the Emirates Air Line in London.

Service engineers are called upon to accomplish ever more difficult and complex tasks within ever shorter time frames. This is particularly evident in the urban sector, where ropeways run virtually day and night all year round, and consequently the time available for service and maintenance work is very tight. Doppelmayr's service manager, Dieter Haas, explains: "We are always up to the minute in order to be able to provide our customers with optimal support at the highest level. That goes for our service offer just as much as it does for the training of our teams and for the tools and equipment we work with."

Time-saving service package for sheave assembly inspection

Doppelmayr has developed a special service package that enables sheave assemblies to be changed in record time. It consists of three important parts: the specially trained Doppelmayr service team, a tailor-made spare parts, equipment and tools package plus a carrier specially designed for sheave assembly replacement. The carrier can effortlessly transport sheave assemblies weighing up to four tons to remote towers which are difficult to access. This means that, rather than taking several days to replace sheave assemblies as was previously the case, the job can be completed within a much shorter time frame and without the need for cost-intensive helicopter deployments.

In the case of London's urban ropeway, the Emirates Air Line, a sheave assembly inspection was performed using this service package for the first time.

Meeting the utmost safety requirements

After fulfilling the extremely high safety requirements for the annual service in London, Doppelmayr was nominated for the innovation award last October as part of the 2016 "Safety first. Second nature." awards presented by Mace Group Ltd – a global consultancy and construction company headquartered in London. The company has placed a major focus on safety for 25 years and recognizes players and organ-

izations that make an exceptional contribution to safety during the course of their work. A total of 120 projects participated in the competition worldwide. | [↗](#)

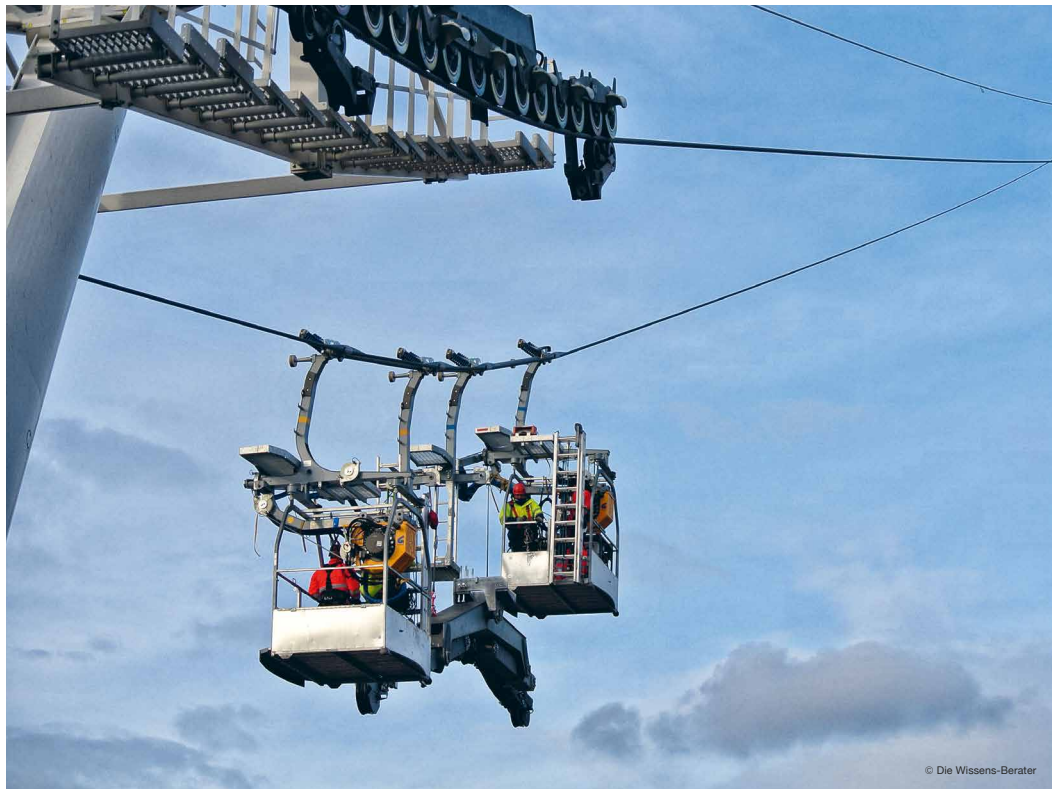


The dedicated carrier for sheave assembly replacement was used for the first time in March 2016 in London and then in Singapore in September.

Footage of the new **service carrier** during its deployment in London can be seen at 1:12 minutes in the new customer support video.

➔ View the new customer support video here:





© Die Wissens-Berater



Facts about the sheave assembly carrier

- Designed for installations that operate all year round
- Suitable for all sheave assembly types
- Rope calculation for additional load always necessary
- Every deployment option for the carrier tested in detail
- Already used in London and Singapore
- Contact: Dieter Haas, Service Manager at Doppelmayr

"The level of competence is essential for the level of maintenance work. We also look into the risk involved. If the local team could not undertake the works due to risks which the team members are not trained for, Doppelmayr's services will be required."



Favian Ooi,
Senior Assistant Director,
Operations & Projects
Development, Mount
Faber Leisure
Group, Singapore

"The Doppelmayr guys were phenomenal. They worked safely. They always had a smile on their face and they were very well briefed and worked excellently together. The supervisor was identifying the needs of teams and coordinating the work."



Stacey Smith,
General Manager,
MACE MACRO
Emirates Air Line,
London

"We are very keen to have a transparent relationship with Doppelmayr. We recognized them as experts, we are a public service accountable to the general public and the government. So it is important for us we can justify the costs, especially when we have limited suppliers to go to."



Jeremy Manning,
Engineering & Assurance
Manager, TfL
(Transport for
London), London



Small ski resorts writ large

In collaboration with the broadcaster, ORF Vorarlberg, Doppelmayr thanks the many people who make small ski resorts possible.

Heading to the ski slope for an hour after school. Or winding down the day on the snowboard. Calling the children to their evening meal from the ski lift. It is often the small ski resorts in local areas that make all this possible. As a rule, they consist of just 1 or 2 surface lifts and play an important role in the promotion of young talents since the easiest way for children to learn how to ski is having a readily accessible lift nearby. This is often made possible

by ski lift crews who work on a voluntary basis. They are the heart of the very small ski areas. Without their passion and commitment, many of these lifts would no longer exist. In many cases, they run the entire ski area: as lift attendant, ticket seller, mechanic, snow groomer driver, friend and helper all in one.

Experiences and personal moments

In order to thank these people for their dedication, Doppelmayr has got together with the regional public broadcaster, ORF Vorarlberg, to launch a campaign. The reports focus on insights into the daily lives of small ski resorts:

Customers – often children – are accompanied during their experiences. These range from small ski races and tours through the ski area to very personal moments, such as the first lift ride of the new season. The ski resort employees are always present, in many cases have known the young talents for a long time and continually give them support.

January 2017 saw the start of a wide-ranging communication drive under the heading "Small ski resorts writ large", in which 13 small regional ski areas were presented on ORF Vorarlberg's TV channel. In February, this was followed by additional reports on ORF Radio Vorarlberg and a competition: "The Quiz Trail". 30 winners were taken to see the men's slalom at the Ski World Cup in St. Moritz on February 19, 2017. The reports from the ORF campaign can be viewed on the Doppelmayr YouTube channel.

Small ski areas around the world play a very important role and the Doppelmayr/Garaventa Group wants to thank all of them. | [📺](#)

30 very happy winners of the ORF Radio Vorarlberg competition, "The Quiz Trail", enjoyed the idyllic weather and great atmosphere at the Ski World Cup in St. Moritz.



➔ Clips of the action can be seen on the Doppelmayr YouTube channel





Doppelmayr chair conquers the stage

In a new production of "Peer Gynt" at the Swabian State Theater in Memmingen (DEU), the actors are currently sharing the limelight with a Doppelmayr chair. The chair is a central part of the stage set and was provided on loan by Doppelmayr. The play, which is regarded as a Norwegian Faust, is a colorful piece of theater based on a dramatic poem by the author, Henrik Ibsen. There have been twelve performances in total: six in the main theater in Memmingen and another six on tour such as the performances in Unterhaching and the Landsberg City Theater. | 1

WIR reader survey: Winners selected

New section!
Progress reports
on pages 24/25

The international reader survey in No. 200, the anniversary issue of WIR, has now been completed. Doppelmayr/Garaventa would like to thank the many people who took part for their interesting and constructive feedback. Our readers have provided a lot of exciting input and suggested some great ideas, which we shall certainly take on board and use where appropriate. Needless to say, we also welcome your feedback at any time. Please feel free to write to dm.wir@doppelmayr.com.

The selection of content and photographs as well as the layout of our company magazine were rated highly by our readers – WIR is seen as attractive, modern and informative. One suggestion has already been adopted in this issue: Reports on installations currently under construction can be found on pages 24/45.

Five people have good reason to celebrate as they will each be receiving a Doppelmayr package in token of thanks for their feedback. We congratulate the lucky winners and wish all our readers continued enjoyment with WIR Magazine. | 1



15 million passengers in ten years

The Portland Aerial Tram up to the university on Portland's highest hill, which first went into service a decade ago, has become an irreplaceable landmark for the city. Before it was built, the journey to Oregon's only academic health center meant a 30-minute bus ride along narrow, winding roads. Now it takes just three minutes to get there. On week days, up to 10,000 passengers use the aerial tram as a means of transport. The connection has boosted the attractiveness of the South Waterfront District. The tram is a popular destination for tourists as it provides a magnificent view of the entire city from the cabins. | 1

➤ View the Portland Aerial Tram video here:



Imprint

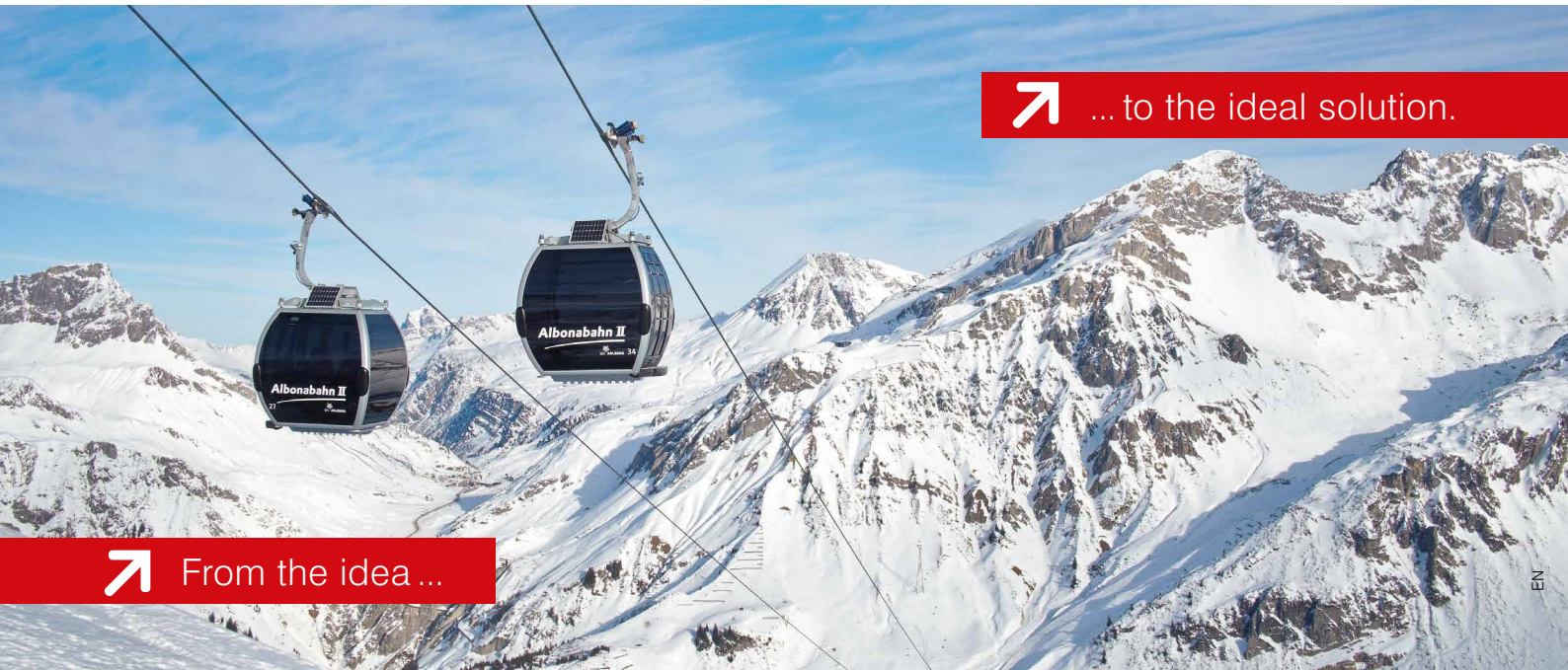
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www.doppelmayr.com

Thank you!

Visions. They empower us to continually rise to new heights. Ideas that we cherish. They enable us to strive for excellence. It was your visions and ideas that we implemented in 2016. Worldwide. Your trust is also our driving force for the future. And that's why we want to say thank you.

www.doppelmayr.com



➤ ...to the ideal solution.

➤ From the idea ...