

# WIR

The Customer Magazine of the Doppelmayr/Garaventa Group Issue 1/2017

 Doppelmayr®

  
GARAVENTA

42nd Year/No. 201

## D-Line chairlifts

Top design, latest technology,  
more customization options

## The Hochfügen ski area chooses first class

Waidoffen is the name of the world's first D-Line chairlift

## Austria's biggest ski area

Sustainable tourism development on the Arlberg



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## The world's first D-Line chairlift

The new Waidoffen chairlift is unsurpassable in terms of design, comfort and efficiency.

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## D-Line chair: coordinated overall design

Everything that passengers and ropeway operators love: high quality, individual options and attractive materials.

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## Ski Arlberg: full circle

The linkage of the ski areas on the Arlberg means that guests can get to all resorts on the Arlberg quickly, simply and comfortably on skis.



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### Great attraction for families with small children as well as ski schools

In the Swiss ski resort of Madrisa, one adult can ride to fun on the slopes with up to five children on one chair – thanks to the child-friendly chair model CS10.

28



### Specialist in steel construction

Gassner Stahlbau GmbH in Bürs/Vorarlberg makes chairs, towers, cabin hangers and special constructions for the Doppelmayr/Garaventa Group.

## New possibilities



An exciting year with great ropeway projects lies behind us, and the year ahead will again see a host of innovations. The development and launch of the D-Line was a great success – winter 2016/2017 saw the start-up of the first D-Line chairlift: Waidoffen in Hochfügen. It will impressively put the benefits of the new product

line to the test and, with the new chair model, is going to set new standards in terms of comfort, safety and design.

The Arlberg is attracting attention with the great new possibilities it now offers. Four spectacular gondola lifts connect the ski resorts on the Arlberg to form Austria's biggest ski region. The intermediate station on the Trittkopf is a ropeway engineering highlight and brings together three ropeway stations in one building. Ski guests can look forward to top comfort and quality.

Our international contracts also proved to be very gratifying. The projects in Russia and Georgia underline the potential for winter sports and, above all, winter tourism in these countries. In North America, too, our customers are investing in the future and opting for comfort and quality.

For the international ropeway industry and also for the Doppelmayr/Garaventa Group, Interalp in Innsbruck is the flagship trade fair for alpine technologies. We therefore look forward to welcoming you to our stand once again from April 26 through 28, 2017. Take a look at the latest from the world of ropeways and let yourself be inspired by the new products, innovations and capabilities of Doppelmayr/Garaventa.

Michael Doppelmayr  
CEO



## Two million YouTube views

In fall 2016, the Doppelmayr/Garaventa Group's YouTube channel broke a new record: Visitors used the platform over two million times to find out more about the company as well as its latest projects and innovations. The channel is regularly updated with exciting videos on the latest from the world of ropeways. | **1**



**↗** Go to YouTube channel



## Three ropeways carry 3.6 million tons of material in six years

On the construction site of Switzerland's biggest pumped storage hydropower plant, which belongs to Kraftwerke Linth-Limmern AG, three heavy-duty ropeways from Doppelmayr/Garaventa were used during the period from 2010 to 2016, two of which set world records. One of the reversible aerial tramways handled a maximum individual payload of 40 tons, while the funicular was designed to carry power plant transformers weighing up to 220 tons. In the six years, these ropeways transported a total of 3.6 million tons of construction materials. The three ropeways brought workers to the construction site high up in the Alps, carrying over 500,000 passengers. As the power station has now been completed, the process of dismantling the two aerial tramways has been ongoing since fall 2016. Despite the fact that the installations are barely ten years old, in comparison with a tourist ropeway, they have been utilized for the equivalent of 40 years within this time period. | **1**



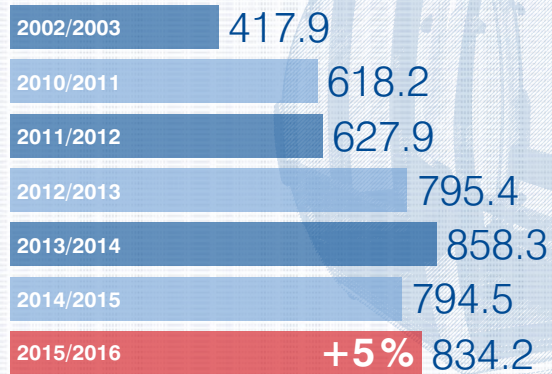


# 103 ropeways and five percent increase in revenues

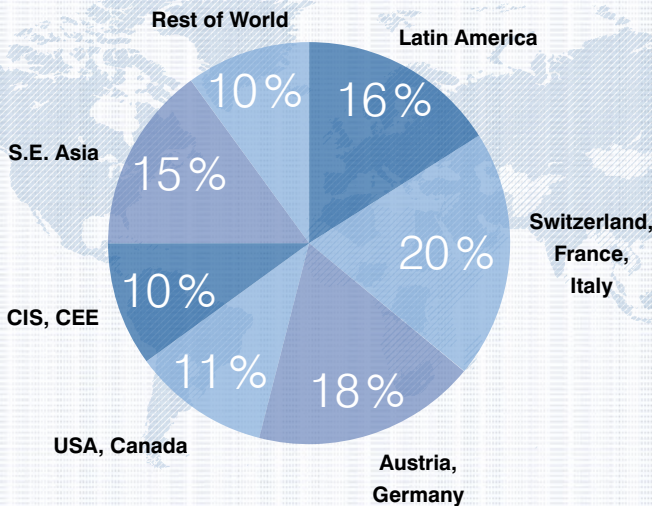
In the fiscal year 2015/2016, the Doppelmayr Group posted a rise in annual revenues of five percent over the previous year to 834 million euros – the second-highest level of sales revenues ever achieved in the company’s history.

Doppelmayr/Garaventa completed a total of 103 installations for 85 customers in fiscal 2015/2016, including many flagship projects and major contracts around the globe. The introduction of the new D-Line product line is already having a positive impact on results. Doppelmayr also increased headcount, with the world market leader for ropeway construction currently employing 2,700 people worldwide – 130 more than in the previous year.

Consolidated Revenues – Development in EUR millions



Revenues by Region 2015/2016



## Innovations, major projects and new market potentials

With the D-Line, the Doppelmayr Group is setting new standards in the ropeway industry and welcoming passengers to a first-class ride experience. The design and function of all components were re-engineered and improved, resulting in further comfort enhancements for passengers and ropeway operators alike. While the alpine region continues to be Doppelmayr’s strongest market, accounting for almost 40 percent of sales revenues, the company saw a strong increase in business in Southeast Asia over the past fiscal year. The share of revenues attributable to this region – shown separately in the graphic for the first time – has tripled from five to 15 percent. This was mainly due to several impressive major projects in Vietnam. While Latin America continues to be the hotspot for urban projects, Asia is leading the way when it comes to summer tourism installations.

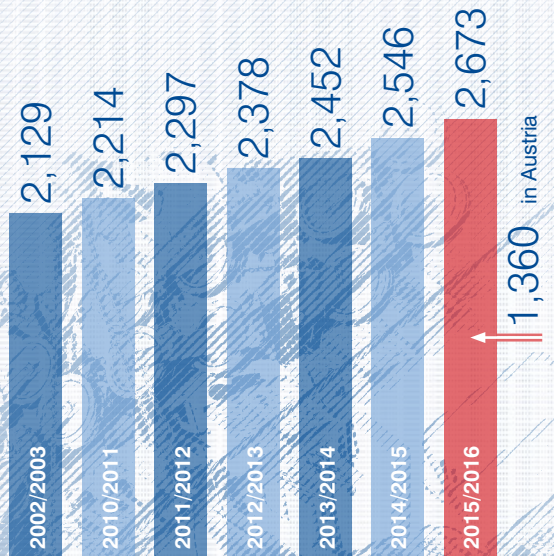
## Exciting projects for 2017

The Arlberg connection with four new gondola lifts, additional lines in the world’s biggest urban ropeway network in Bolivia, and the next world-record ropeway in Vietnam are just a few examples that are set to attract media attention in 2017. Projects for the Olympic Winter Games in South Korea as well as further D-Line lifts are also nearing completion. The move to the new administration building at the company’s Hohe Brücke site is also on the agenda for 2017. | 1



## Headcount

Development Worldwide / Austria





# D-Line chairlifts: Eyecatchers with all the extras

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Chairlifts are one of the core products of the Doppelmayr/Garaventa Group. As a major part of the D-Line, this product has also been entirely redeveloped and optimized, and now welcomes passengers to first class.

Imagine taking a smooth, comfortable ride up the mountain while feeling cozy and warm and enjoying the magnificent winter landscape. That's exactly what it feels like traveling on a Doppelmayr D-Line chairlift. New features, new technologies and new designs open up entirely new possibilities. But how did this innovation come about?







Innovations focused on a common denominator



Attractive selection based on the modular design principle



Generously proportioned, ergonomic and comfortable



Stylish – at six meters per second





### **Innovations focused on a common denominator**

Doppelmayr/Garaventa is continually developing innovations for customers. This pioneering work has given the company its position as global market leader and also consolidated it. Equally, however, this has historically led to a huge complexity in terms of product variants. The wide range of models has now been focused on a common denominator with the D-Line. Many years of experience and know-how have been combined with ultramodern design, more customization options and the latest technical achievements. Many components have been standardized in the interests of simple installation, efficient training and lean spare parts management. The D-Line addresses the growing demands for comfort, speed, capacity and safety, while simultaneously optimizing manufacturing and installation processes

– benefits that create true added value for customers. Years of research and development have gone into the product: ergonomic and design studies, vibration and flow simulations, and much more besides. Many innovations on the new D-Line chair are not directly visible.

### **Attractive selection based on the modular design principle**

Another new feature of the D-Line is the modular chair concept. In other words, there is one basic chair model and many options that can be added. When developing the new chair generation from Doppelmayr, another important objective was to give ropeway operators more customization options. One special feature is the large surface on the back of the chair, which consists of a mesh banner. These meshes are quickly and easily fastened, and consequently readily replaced. That means

they can be perfectly coordinated with the ski resort's corporate design and also used for advertising slogans or promotion campaigns. In addition, there is also a choice of colors for the upholstery covers, upholstery stitches and bubbles as well as color-coated components.

### **Generously proportioned, ergonomic and comfortable**

Riding on a D-Line chairlift is an experience for guests because now they can enjoy even more space and comfort. On the one hand, thanks to the seat: Generously sized seating with a width of 520 mm throughout provides every passenger with maximum comfort. The ergonomic shaping also ensures a relaxing seated position. On the other hand, thanks to the optimized comfort suspension: Right from the first trip, it rapidly becomes clear that an entirely new ride experience is about to unfold.





Different color schemes as well as individual branding options make every D-Line chairlift unique. Another unique feature is the comfort offered by the ergonomically designed individual seats.



The perfected chair suspension helps to create motion that feels like being “pillowed on clouds”, both on the line and on entry into the station.

The suspension noticeably reduces vibration and sound propagation. In order to be able to provide a relaxing ride when carrying winter sports practitioners with different kinds of sports equipment, Doppelmayr has also introduced a further development of the individual footrests on the chairlift. Skiers and snowboards benefit from the wider contact surfaces.

#### Stylish – at six meters per second

The D-Line chairlifts are attractive eye-catchers. Developed in collaboration with a renowned designer, the chairs impress with understated elegance – the visual impression of the sturdy

construction in itself gives a feeling of security. D-Line chairlifts are nonetheless not just a stylish and comfortable means of transport, they also offer speed. The fact that the faster 6 m/s is possible with the D-Line chairlift shortens trip time and effectively helps to reduce capacity bottlenecks.

The world's first D-Line chairlift went into service in Hochfügen in December 2016 and marks another milestone in ropeway engineering. [1](#)





# An innovation that matches our philosophy

WIR spoke with Helmuth Grünbacher, managing director of Skiliftgesellschaft Hochfügen GmbH.



The Hochfügen operating company has joined forces with Doppelmayr to implement an innovation which is now being used for the first time worldwide: a D-Line chairlift.

**WIR.** When you placed the order for the new Waidoffen lift, there were no D-Line chairlifts anywhere in the market. How did you come to be the first operating company worldwide to build the new lift?

**Ing. Helmuth Grünbacher:** As part of our quality drive, we decided in favor of Doppelmayr. Direct drive, integrated photovoltaics, heated seats and automatic restraining bars plus lifting platform for maximum child safety were all factors that influenced our decision to purchase, along with an attractive offer. Once we'd signed on the dotted line, Andreas Natter from Doppelmayr came to me and said he wanted to install a new premium product called D-Line in our case. Needless to say, being the

first ski resort to implement a world first was a challenge for us. But the decision has certainly paid off. Now that the lift has been completed, we can jointly claim with pride that it's a fantastic installation for our guests and for us as operator.

**WIR.** With Waidoffen, you're sending a clear message in the direction of environmental protection and sustainability. What was the motivation behind this?

**Ing. Helmuth Grünbacher:** It has always been part of our philosophy to respect and protect our natural surroundings. We are making a conscious effort to promote the idea of sustainability. We are placing an emphasis on the stronger use of available energy sources. With the photovoltaic installation and the resource-saving direct drive, we have taken a major step forward. Doppelmayr did a great job – our joint contribution for the environment.

**WIR.** The new Waidoffen lift has state-of-the-art engineering features. How important is this innovation for your ski resort?

**Ing. Helmuth Grünbacher:** The Waidoffen 6-seater chairlift opens up a new dimension for our ski resort. The lift lies at a very high elevation, in an area with reliable snowfall, which means we can start the season early. The decision in favor of a D-Line chairlift was a targeted investment in quality – it brings comfort on a grand scale, and halving trip time compared to the predecessor lift was also a major argument in its favor. We have high expectations that the Waidoffen lift will be very popular with our guests and that they will want to stay longer.

**WIR.** Many thanks for your time. | 1





# The world's first D-Line chairlift

With the new Waidoffen D-Line chairlift, Doppelmayr brings first-class travel to the Hochfügen ski resort.

The new 6-seater chairlift Waidoffen is the first D-Line chairlift worldwide and incorporates state-of-the-art engineering features. Thanks to the latest technology from Doppelmayr, it meets the highest demands in terms of safety and design, and represents a quantum leap in comfort. The ergonomically formed individual seats, which also offer greater width, are particularly comfortable as well as having integrated heating. The bubbles ensure a pleasant journey even in wind and weather. Waidoffen replaces a quad chairlift and now carries one third more passengers in half the time. Once they arrive at the top at 2,300 m, all winter sports enthusiasts – whether beginners, leisurely or athletic skiers – can look forward to idyllic trails.

## Sustainability on the mountain

The top station is equipped with highly efficient photovoltaic elements that are directly integrated into the station roof. The centerpiece of the installation – the new Doppelmayr Direct Drive – is also unrivaled in terms of energy efficiency. In addition, it is particularly low on noise and vibration. Also in operation for the first time in Hochfügen is the

new Doppelmayr control system, Doppelmayr Connect.



Needless to say, this modern ropeway is cutting edge where safety is concerned. The restraining bars on the chairs close and lock automatically once the passengers are on board, and are only released and opened again on arrival at the top station. A loading conveyor which can be raised or lowered in the boarding area makes it easier for younger guests to take their places. This means that children can board by themselves, like the “grown-ups”.

Waidoffen has everything the heart desires. For skiers of all ages and for the operating crew, the D-Line chairlift is a genuine highlight. | 🇦🇹



## ⚙️ 6-CLD-B Waidoffen

Owner	<b>Skiliftgesellschaft Hochfügen GmbH</b>
Location	<b>Fügenberg, Tyrol (AUT)</b>
Inclined length	<b>1,059 m</b>
Vertical rise	<b>317 m</b>
Capacity	<b>2,600 PPH</b>
Carriers	<b>58 6-seater D-Line chairs</b>
Trip time	<b>approx. 4 min</b>
Opened	<b>November 2016</b>

"This premium product will offer our guests a very special ride sensation in terms of comfort, finish, speed and safety."  
**Helmuth Grünbacher, Managing Director of Skiliftgesellschaft Hochfügen GmbH**



# The new D-Line chair


WIR presents the highlights of the D-Line chair. Many innovations and technical achievements are not directly visible, others plain to see. We give you a brief overview.

**T**he D-Line combines ultramodern design with top comfort. And that is masterfully demonstrated by the chairlifts. With top quality, new materials and optimized components, passengers and ropeway operators get to experience a chairlift that is absolutely cutting edge.

## Perfect design with individual options

The D-Line chairlift shows entirely new facets. For ropeway operators, the coordinated design throughout brings new benefits and possibilities: chair backs, upholstery and many other components that can be customized ensure the unique recognition value of every D-Line chairlift. During the course of the development process, new actuating systems

for the bubbles and restraining bars were engineered. In the interests of straightforward maintenance, the components are very easily accessible while at the same time optimally protected. The seat heating also incorporates several technical innovations. The cable routing has been optimized and the new heating mats now have plug connectors for connection to the main cable harness. The seats with newly designed surface texture and optimized upholstery are a highlight in terms of comfort, look and resistance.

The innovations resulting from many years of experience enhance the attractiveness and reliability of the chairlift. | 

## Spacious bubbles

The new shape of the bubbles, which come in a choice of colors, creates an entirely new sense of space. The optimized mechanism makes operation convenient for the passengers.



## Removable seat dividers

Each of the optimized seat dividers is quick and easy to remove. This means that physically impaired passengers with special sports equipment can also take their places on the chair in comfort.



## Optimal ride comfort

The newly developed comfort suspension for speeds of up to 6 m/s guarantees an exceptionally smooth ride with unparalleled comfort.





### Restraining bar operating options: manual, lock or autolock

In addition to the manual option, the D-Line chair offers two other operating systems for the restraining bar. Lock means that the bar is automatically locked after manual closure by the passengers and automatically released, then opened in the arrival station. In the case of autolock, however, the restraining bar closes and locks automatically. This operation is also monitored to ensure that the restraining bar is closed when the carrier leaves the station. Here again, the restraining bar is automatically released and opened at the other end.



### Optimized, wider footrests

The newly designed footrest is particularly comfortable and ideally suited for skiers and snowboarders.



### Room for creativity on the back of the chair

The large, replaceable mesh advertising banners on the back of the chair open up new options for customization.



### Wider, customizable seats with optimized seat heating

The comfortable, 520 mm wide seats with customizable upholstery offer plenty of room throughout. The optimized seat heating incorporates heating mats with a standardized cable length and practical plug connectors with integrated fuse, making them easier to handle.



### D-Line Chair Facts & Figures

Speed	<b>up to 6 m/s</b>
Seat width	<b>520 mm</b>
Gauge, 6-CLD	<b>6.4 m</b>
Gauge, 8-CLD	<b>7.7 m</b>
Conditions of carriage	<b>Depending on chair model, up to 7 children with a body height exceeding 90 cm can be carried with just one accompanying adult.</b>

➤ Further insights and details of the D-Line chair can be found on YouTube






# Austria's biggest ski area




The new ropeway connection between Zürs and Alpe Rauz in Stuben on the Arlberg demonstrates how sustainable tourism development works.

No less than four new ropeway installations have made Ski Arlberg Austria's biggest ski area, with 305 kilometers of trails and 87 lifts. They enable guests to reach every resort in the Arlberg ski area quickly, simply and comfortably. Whether heading for St. Anton, St. Christoph, Stuben, Zürs, Lech, Oberlech or Schröcken and Warth – guests board the nearest lift and have the entire mountain lift infrastructure open to them. From Zürs, the Trittkopf lift I goes to the new intermediate station; from there, it is possible to ride either to the new top station of the Trittkopf lift II or to take the new Flexen lift on to Alpe Rauz in Stuben. Here, the new Albona lift II is available for those wishing to travel further.

The link-up has given rise to a unique ski circuit: The "Run of Fame" takes you over the Arlberg and through the entire Ski Arlberg area. Skiers are accompanied by the Run of Fame stars – info boards in honor of the skiing stars who have hailed from the Arlberg. This makes the new ski circuit an unforgettable experience.

Now doubled in size, the Arlberg ski area will offer visitors even greater comfort than before. The new lifts are a key part of the sustainable transport concept for the Arlberg: Every day, the Flexen lift, for example, replaces 120 bus trips – fewer automobiles enter the villages, reducing the impact on local character. | 



 Go to video: the new Trittkopf lift



"The Flexen lift means improved mobility for the entire area and skiers can now make better use of the wide variety of ski trails."

**Mario Stedile-Foradori,**  
CEO of Arlberger Bergbahnen AG

"Perfect trail grooming, high snow reliability, a large number of trails and deep snow descents, not forgetting the excellent cuisine – the Arlberg is already a special experience for every skier."

**Philipp Zangerl,**  
CEO of Ski Zürs AG and Managing Director of Stubner Fremdenverkehrs-GmbH

"What was for 50 years a vision has now become a reality! Setting your sights higher, thinking ahead – we're all very proud!"

**Willy Skardarasy,**  
Chairman of the Supervisory Board, Ski Zürs AG



## 10-MGD Flexen Lift

Owner	<b>Flexenbahn GmbH</b>
Location	<b>Zürs, Vorarlberg (AUT)</b>
Inclined length	<b>1,771 m</b>
Vertical rise	<b>562.5 m</b>
Carriers	<b>47</b>
Capacity	<b>2,400 PPH</b>
Speed	<b>6.0 m/s</b>
Trip time	<b>5.9 min</b>

## 10-MGD Trittkopf Lift Section 1

Owner	<b>Ski-Zürs AG</b>
Location	<b>Zürs, Vorarlberg (AUT)</b>
Inclined length	<b>1,978 m</b>
Vertical rise	<b>503 m</b>
Carriers	<b>59</b>
Capacity	<b>2,400 PPH</b>
Speed	<b>6.0 m/s</b>
Trip time	<b>7.4 min</b>

## 10-MGD Trittkopf Lift Section 2

Owner	<b>Ski-Zürs AG</b>
Location	<b>Zürs, Vorarlberg (AUT)</b>
Inclined length	<b>959 m</b>
Vertical rise	<b>193 m</b>
Carriers	<b>17</b>
Capacity	<b>1,200 PPH</b>
Speed	<b>6.0 m/s</b>
Trip time	<b>4.2 min</b>

## 10-MGD Albona II

Owner	<b>Stubner Fremdenverkehrs GmbH</b>
Location	<b>Stuben, Vorarlberg (AUT)</b>
Inclined length	<b>2,172 m</b>
Vertical rise	<b>680 m</b>
Carriers	<b>48</b>
Capacity	<b>2,000 PPH</b>
Speed	<b>6.0 m/s</b>
Trip time	<b>7.2 min</b>





➤ Closing the circle (video)



## New 8-seater chairlift in Ischgl

A trip on the new Flimjoch lift promises to be a special experience.

The 24-year-old Flimjoch lift was the absolute transport king of all the lifts operated by Silvrettaseilbahn AG. By the end of the winter season 2015/2016, it had made almost 30 million trips. Since December 2016, it has been replaced by an 8-seater chairlift from Doppelmayr.

The top station of the new lift has two exits – one on the eastern side and one on the northern side.

This was done to address the issue of changing wind conditions on the ridge. Depending on the wind situation, either the eastern or northern exit can be opened – an improvement in comfort that should not be underestimated.

Another special feature is the tower number 3. It is an intersection tower and consequently part of two 8-seater chairlifts: the Höllboden lift and the Flimjoch lift. With up to 6,900 passengers an hour, it ranks as one of the towers with the highest passenger flows worldwide. | 1



### 8-CLD-B Flimjoch Lift

Owner	<b>Silvrettaseilbahn AG</b>
Location	<b>Ischgl, Tyrol (AUT)</b>
Inclined length	<b>1,797 m</b>
Vertical rise	<b>454 m</b>
Capacity	<b>3,200 PPH</b>
Carriers	<b>87 8-seater chairs with bubbles and seat heating</b>
Trip time	<b>6.5 min</b>
Opened	<b>November 24, 2016</b>

➤ More about the Flimjoch lift plus fascinating videos of the construction process can be found on the official construction blog.



“Our new 8-seater chairlift offers even greater comfort than before, thanks to the chair model.”

**Markus Walser, CEO of Silvrettaseilbahn AG**





# Königsberg: An experience all year round



A bike park with a novel transport system from Doppelmayr supplements the ski operations of the Königsberg lifts.

To safeguard the survival of the Königsberg lifts and to address the shortage of snow experienced by the ski area in recent years, the operating company, Königsberg-Hollenstein Skilifte GmbH, developed a bike park based on state-of-the-art criteria. The coherent overall concept, the palpable sense of optimism and the enthusiasm of the managing director provided Doppelmayr with the ideal starting point for the realization of a pilot project with Königsberg-Hollenstein Skilifte as partner. The novel ProTow transport system for bicycles has been used here for the first time worldwide. It opens up new possibilities for surface lift oper-

ators and gives mountain bikers a particularly convenient means of getting up the mountain.


The newly acquired flexibility is particularly important for the operators: "When there isn't much snow, we have the option of running two surface lifts on the artificial snow trails for the skiers and running one at the same time for mountain bikes. That's a USP for Königsberg," says the resort's managing director. The novel transport system, ProTow, is an attraction in the biker scene, which simultaneously ensures better capacity utilization for the lifts and the restaurant in the adventure park. The first part of the Königsberg Adventure Park was opened in October 2016 – further highlights and infrastructure will be added in spring 2017. | 



## 2-SL Königsberg I

Year	<b>1971 (conversion to self-service 1988)</b>
Location	<b>Hollenstein an der Ybbs, Lower Austria (AUT)</b>
Inclined length	<b>824 m</b>
Max. tow track gradient	<b>42%</b>
Speed	<b>3.0 m/s</b>
Capacity Ski operations	<b>1,055 PPH with T-bars</b>
Capacity Bike operations	<b>Final stage: 400 bikers/h with ProTow</b>
Ski area elevation	<b>up to approx. 1,400 m</b>



 Go to video of bike park opening

"The new transport system for mountain bikers enables us to safeguard the survival of our lifts."

**Herbert Zebenholzer,**  
Managing Director of  
Königsberg-Hollenstein  
Skilifte GmbH




## ProTow brings bikers up the mountain

Mountain bikers now have a relaxing way of accessing their downhill runs by surface lift.

In the new Königsberg bike park in Hollenstein an der Ybbs, a surface lift installation is the first worldwide to be granted an operating permit to carry mountain bikers with the novel ProTow system from Doppelmayr.

Using the new transport system is simple: When the biker boards, the ProTow device is attached to the handle bars and during the uphill trip the attachment tube is fixed to the bike handle with the right hand. As soon as the biker lets go of the attachment tube, the ProTow device is automatically released from the head tube thanks to its well thought out design,

thus ensuring safe transport of passenger and bike. The uphill trip is both relaxing and safe for the biker, who holds the handle bars with both hands and consequently is always in full control of the bike.

It takes between one and two hours to convert a lift installation from winter operation for use of the ProTow system. Doppelmayr has further developed the system, which is based on a patent belonging to Rider Developments Ltd, and optimized it for series production. Retrofitting is a straightforward process for many surface lift types – even the older installations. Once again, Doppelmayr is setting an innovation milestone and opening up new possibilities for surface lift operators. | 

**Conversion takes just 1-2 hours!**







## High-speed chairlift in Vorarlberg

The child-friendly Silvretta lift now brings winter sports enthusiasts to the summit of Gampapinger Mountain in top comfort and top timing.

As from the winter season 2016/2017, the Silvretta Montafon ski area in Vorarlberg will be introducing a huge improvement in comfort with the Silvretta lift from Doppelmayr. The new 8-seater chairlift with seat heating and bubbles, which replaces a double chairlift, marks another important step towards modernization of the lift infrastructure. It now brings winter sports enthusiasts directly to Gampapinger Mountain, where twelve trails and five ski routes await them as descent options. Pe-

ter Marko, managing director of the Silvretta Montafon operating company, had this to say: "Even the chairs are state of the art: The comfort seats have padding and seat heating and the child-friendly restraining bars with footrests operate automatically."

### Unobtrusive, highly functional construction

The chair parking facility was installed in the basement to make optimal use of the limited space available in the area of the bottom station. And to ensure that the structure harmonizes visually with its surroundings as well as satisfying the strict requirements for protecting the landscape, the unobtrusive bottom station "grows" out of the rock face. | 1



### 8-CLD-B Silvretta Bahn

Owner	<b>Silvretta Montafon GmbH</b>
Location	<b>St. Gallenkirch, Vorarlberg (AUT)</b>
Inclined length	<b>2,093 m</b>
Vertical rise	<b>685 m</b>
Capacity	<b>3,200 PPH</b>
Carriers	<b>93 8-seater chairs</b>
Speed	<b>5.5 m/s</b>
Trip time	<b>6.5 min</b>
Opened	<b>Winter 2016/17</b>

"Thanks to the high speed of up to 5.5 meters per second, the trip takes just 6.5 minutes despite covering a length of over two kilometers."

**Peter Marko,**  
Managing Director of  
Silvretta Montafon








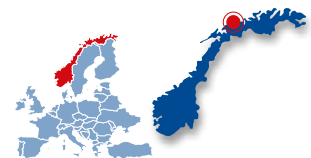
## Modernization in the polar night: rebuilding the world's northernmost ropeway

The historic Tromsø tramway has undergone a major renovation after 45 years in service.

The reversible aerial tramway in the Norwegian city of Tromsø is regarded as the northernmost passenger ropeway in the world. It was opened in 1961 by the shipping company Brødrene Jakobsens Rederi, which played a pioneering role in Norwegian business and in the fishing industry, and was instrumental in developing the infrastructure in the region around Tromsø. Today, Tromsø is a flourishing city with growing numbers of visitors who come to enjoy the fascination of the northern lights on the Fjellheisen.

The modernization process began in 2012 when Garaventa was addressed to review the 45-year-old installation. Their report showed that the tramway had reached its end of lifetime, so the decision was made to renew the tramway – one of the most popular sights in Tromsø. The companies Fjellheisen, Fjellbygg and Garaventa worked closely together to conquer all challenges. The time frame for the construction was very tight and the work in winter 2015/2016 was performed during the 24-hour darkness period, which occurs in the north of Norway.

The snow, wind and icy temperatures were also challenges that the tramway specialists mastered with excellence. Like the original cabins, the new ones carry the two symbols of the Jakobsen shipping company: the seal and the polar bear. 



### 28-ATW Tromsø–Fjellheisen

Owner	<b>Skips AS Nordfisk</b>
Location	<b>Tromsø (NOR)</b>
Inclined length	<b>770 m</b>
Vertical rise	<b>360 m</b>
Speed	<b>7.0 m/s</b>
Capacity	<b>400 PPH</b>
Carriers	<b>2 cabins for 28 passengers each plus conductor</b>
Opened	<b>April 2016</b>

"We were very impressed by Garaventa and their professional, hard-working team. Everything went smoothly even though the climate conditions here can be very tough."  
**Guttorm Jakobsen, Operations Manager at Fjellheisen Tromsø.**





## Growth of the Schmitten ski area

With the zellamseeXpress, a new 10-passenger gondola lift, a long-held dream of the operators in Zell becomes reality.

The Schmitten ski area in Salzburg is expanding its winter sports offer with a new 10-passenger gondola lift. The zellamseeXpress, which went into service in winter 2016/2017, brings guests from the Glemm Valley up to the Schmitten. From there, the new lift makes a 3.5-kilometer-long descent accessible once again, which

had been popular with skiers during the period from 1930 to 1980. Doppelmayr took charge of the construction of the zellamseeXpress. The D-Line gondola lift offers everything the heart desires in terms of first-class travel. In addition to the comfortable seat heating, passengers can enjoy a world first. In the six Jukeboxx cabins, they can log on using the free WLAN and are then automatically pointed to a Jukeboxx button, enabling them to select their favorite hit and listen to it during the trip.

The zellamseeXpress runs from an angle station above Viehhofen to the top station on the Salersbachköpfl at an elevation of 1,920 m (Section 2). By 2018, Section I will also be extended down to Viehhofen as part of a second construction phase. | 1



### 10-MGD zellamseeXpress

Owner	<b>Schmittenhöhebahn AG</b>
Location	<b>Zell am See, Salzburg (AUT)</b>
Inclined length	<b>2,883 m</b>
Vertical rise	<b>801 m</b>
Speed	<b>6.0 m/s</b>
Capacity	<b>2,800 PPH</b>
Carriers	<b>86 ten-passenger cabins with seat heating</b>
Trip time	<b>9.2 min</b>
Opened	<b>Winter 2016/17</b>

“An old dream has come true with the zellamseeXpress. As well as providing a significant quality improvement for our ski area, the new lift also gives our guests more ski trails to choose from. The entire region benefits as a result.”



**Dr. Erich Egger, CEO of Schmittenhöhenbahn AG**






## Expansion at Big Sky Resort in Montana

The first 6-seater chairlift with bubbles and seat heating is attracting attention among winter sports enthusiasts at one of America's biggest ski resorts.

Big Sky Resort, Montana, is home to America's Biggest Skiing® and Base Camp to Yellowstone National Park. The ski resort operators are currently working with Doppelmayr on a major expansion aimed at enhanced comfort for guests. The new 6-seater chairlift Powder Seeker is the region's first installation to fea-



ture bubbles and seat heating. It replaces a triple chairlift and since December 2016 has been carrying guests to the Lone Peak Tram, which was built by Doppelmayr back in 1996. In addition to the new 6-seater chairlift, Doppelmayr also installed the new Challenger triple chairlift in 2016, which also transports people up the Lone Peak Mountain where skiers can access some of the best terrain that Big Sky has to offer.

Soil conditions posed the biggest challenge during construction of the new ropeways as the alignments cross glacier moraines, which called for special foundations. This made the installation work more demanding than usual. The construction materials had to be flown by helicopter to the top station and the crews could only reach the construction sites higher up the mountain on foot. Despite the exceptional conditions, Doppelmayr was able to meet the tight time frame of just eight months and completed both chairlifts on schedule. 

"Throughout our long and successful collaboration, Doppelmayr has shown itself to be a reliable partner and the support they have given us has always been perfect. The same goes for the new lifts, which have greatly enhanced the comfort skiers and riders enjoy in our ski resort."

**John McGregor, Senior Vice President of Mountain Operations at Boyne Resorts**




### 6-CLD-B Powder Seeker

Owner	<b>Big Sky Resort</b>
Location	<b>Big Sky, Montana (USA)</b>
Inclined length	<b>852 m</b>
Vertical rise	<b>251 m</b>
Capacity	<b>3,200 PPH</b>
Carriers	<b>31 6-seater chairs with bubbles and seat heating</b>
Speed	<b>5.0 m/s</b>
Towers	<b>14</b>
Opened	<b>December 2016</b>

### 3-CLF Challenger

Inclined length	<b>1,253 m</b>
Vertical rise	<b>504 m</b>
Capacity	<b>1,637 PPH</b>
Carriers	<b>164</b>
Speed	<b>2.5 m/s</b>
Towers	<b>18</b>
Opened	<b>December 2016</b>

 Go to the video of the new Powder Seeker





## Soaring with the Eagle



Further information and videos can be found on Facebook: [www.fb.me/ArthursSeatEagle](http://www.fb.me/ArthursSeatEagle)

© Arthurs Seat Eagle 2016, Bruce Phillips

Passengers riding on the Arthurs Seat Eagle can now glide over the Mornington Peninsula in Australia just like the local wedge-tailed eagles.

The detachable 8-passenger gondola lift, Arthurs Seat Eagle, replaces the region's much-loved Arthurs Seat Chairlift and since December 2016 has been bringing guests up to the hill known as Arthurs Seat in Victoria. The ride opens up spectacular panoramic views across the national park and the bay on the Mornington Peninsula. Lightweight, removable polycarbonate panels and Safari barred windows make it possible to create the right ride experience to suit the season and the

elements. In the winter, guests are protected against wind and weather; in the summer, they can enjoy the fresh air during their trip. All the cabins and the station buildings have barrier-free access. As well as making the Arthurs Seat region in general all the more attractive for tourists and local residents, the all-year lift installation has created 60 new jobs.

Doppelmayr was available on site as a reliable professional partner throughout the entire planning and implementation. The new gondola lift is a showcase project as it is the first continuous-movement monocable ropeway built outside a ski resort in Australia for 20 years. | 

### 8-MGD Arthurs Seat Eagle

Owner	<b>Arthurs Seat Skylift Pty Ltd</b>
Location	<b>Mornington Peninsula, Melbourne (AUS)</b>
Inclined length	<b>1,030 m</b>
Vertical rise	<b>232 m</b>
Speed	<b>3.0 m/s</b>
Capacity	<b>1,130 PPH</b>
Towers	<b>11</b>
Carriers	<b>24 8-passenger cabins</b>
Opened	<b>December 2016</b>

"The ride on the Arthurs Seat Eagle really is just like the flight of the eagle – smooth and breathtakingly beautiful."


**Hans Brugman,**  
CEO Arthurs Seat Eagle



## Completely modernized urban funicular

The new funicular railway in Lugano brings tourists and local residents along the historic route from the railroad station to the city center.

The funicular in Lugano, which links the railroad station with the city center, originates from the year 1886 and is a key means of public transport. At the time, it was the first installation of its kind to incorporate an Abt passing loop. In fall 2016, Garaventa performed a complete

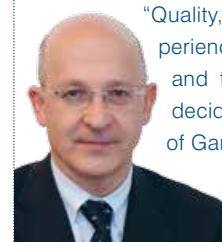
overhaul of the installation and took charge of the project planning, engineering, delivery and installation of the entire electromechanical equipment as well as the cabins. Two funicular cabins bring up to 2,240 passengers an hour from the recently refurbished railroad station to the city center. The limited space along the historic route – which encompasses tunnels, bridges and a cathedral – was a particular challenge for this urban project. | 



### 100-FUL Lugano–Stazione

Owner	<b>Trasporti Pubblici Luganesi SA</b>
Location	<b>Lugano, Tessin (CHE)</b>
Inclined length	<b>206 m</b>
Vertical rise	<b>50 m</b>
Speed	<b>3.0 m/s</b>
Capacity	<b>2,240 PPH</b>
Carriers	<b>2 funicular cabins, 100 passengers each</b>

"Quality, their many years of experience with funicular railways and the references were the deciding factors in our choice of Garaventa."



**Roberto Ferroni,**  
Direttore Trasporti Pubblici Luganesi SA






## First D-Line world record in Sölden

The new, exceptionally comfortable Giggijoch lift is currently the continuous-movement monocable gondola with the highest capacity worldwide at 4,500 passengers per hour and direction.

Since winter season 2016/2017, visitors to the Sölden ski area have been able to enjoy even greater comfort. The new Giggijoch lift is a D-Line installation and belongs to the next ropeway generation from Doppelmayr. It promises a first-class experience all along the line, and its new possibilities and unique features make it a true highlight. The visionary new installation, which Doppelmayr implemented in collaboration with the operating company, Bergbahnen Sölden, carries up to 4,500 passengers per hour and direction. That is more passengers than any other continuous-movement monocable gondola in the world. The high capacity in combination with a sophisticated access system positively impacts waiting times, enabling guests to reach the slopes quickly but without hassle. A total of 134 cabins, each offering space for 10 passengers, bring winter sports enthusiasts from the bottom station in Sölden up to the Giggijoch. During the trip, they enjoy the comfort and exceptionally smooth motion of the D-Line – a sense of space and a ride experience like never before.

The bottom station is an architectural sight in itself and a landmark in Sölden. The space limitations gave rise to a tower-like central building which also houses the ropeway equipment. A particularly eye-catching feature is the panoramic depiction of the Ötztal Alps in perforated metal, which conceals the cabin boarding area. Passengers have convenient access to the elevated level by means of an escalator.


The predecessor to the Giggijoch lift recorded a total of 37,000 operating hours between 1998 and 2016. It will continue to bring many skiers and snowboarders to the slopes in the future as it is to be re-installed in Hochötz, where it will replace the Ochsendgarten lift. 



### 10-MGD Giggijoch Lift

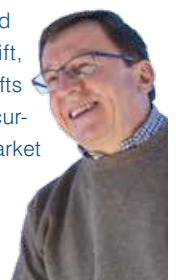
Owner	<b>Bergbahnen Sölden</b>
Location	<b>Sölden, Tyrol (AUT)</b>
Inclined length	<b>2,648 m</b>
Vertical rise	<b>921 m</b>
Speed	<b>6.5 m/s</b>
Capacity	<b>4,500 PPH</b>
Carriers	<b>134 D-Line cabins for 10 passengers each</b>
Trip time	<b>8.87 min</b>
Opened	<b>November 2016</b>



 Go to video: a day's skiing on the Giggijoch in Sölden

"With the Gaislachkogel and now the new Giggijoch lift, we have the two feeder lifts with the highest capacity currently available on the market in our ski area."

**Jakob ("Jack") Falkner,**  
Managing Director of  
Bergbahnen Sölden





## Tourism enjoys a boom in the Caucasus

Doppelmayr is also playing its part in the further development of winter tourism in Georgia, building three new lifts in 2016 alone.

In Georgia, the state is investing heavily in tourism, especially in the Caucasus Mountains. The goal is to make the region even more attractive for winter sports enthusiasts. Doppelmayr is making a significant contribution to the development of winter tourism with the construction of several installations. 2015 saw two new 6-seater chairlifts go into service, both of which have been a great success. These were followed by a surface lift, a fixed-grip quad chairlift and a detachable 6-seater

chairlift in the Bakuriani ski area as well as a detachable 6-seater chairlift in Gudauri in 2016.

The family-oriented ski area Bakuriani is a three-hour drive from the capital, Tbilisi, and offers alpine and Nordic trails as well as tobogganing and horse riding. Bakuriani was an Olympic training venue in the 1970s and 80s. The vacation resort of Gudauri lies 120 km from Tbilisi and primarily offers good trails for advanced skiers. The area is also popular for heli-skiing. The new 6-seater chairlift from Doppelmayr provides access to an existing trail and means a huge increase in comfort for guests. The collaboration with Doppelmayr has a long tradition and the first jointly built lifts go back to 1986. ↴



### 6-CLD Mitarbi 1

Owner	<b>Mountain Resorts Development Company</b>
Location	<b>Bakuriani, Samtskhe-Javakheti (GEO)</b>
Inclined length	<b>1,255 m</b>
Vertical rise	<b>357 m</b>
Speed	<b>5.0 m/s</b>
Capacity	<b>1,800 PPH</b>
Carriers	<b>46 6-seater-chairs</b>
Trip time	<b>4.6 min</b>

### 4-CLF Mitarbi 2

Location	<b>Bakuriani, Samtskhe-Javakheti (GEO)</b>
Inclined length	<b>893 m</b>
Vertical rise	<b>222 m</b>
Speed	<b>2.3 m/s</b>
Capacity	<b>1,406 PPH</b>
Carriers	<b>77 fixed-grip quad chairs</b>
Trip time	<b>6.5 min</b>



### 6-CLD Gudauri Lift-8

Location	<b>Gudauri, Mtskheta-Mtianeti (GEO)</b>
Inclined length	<b>2,353 m</b>
Vertical rise	<b>537 m</b>
Speed	<b>5.0 m/s</b>
Capacity	<b>2,800 PPH</b>
Carriers	<b>128 6-seater chairs</b>
Trip time	<b>8.2 min</b>

"Doppelmayr has shown great commitment and made a major contribution to the development of the ski resorts in Georgia. Throughout our collaboration, we have come to appreciate the top-quality management, the professional attitude and the technological level of this company and its team. This is the company that we trust the most."

**Aleksandre Onoprishvili,**  
Director, Mountain Resorts  
Development Company









## The first CS10 chairlift in Switzerland

With the new Schaffürggli chairlift, the Madrisa ski area has introduced a huge increase in comfort, particularly for ski schools and families with small children.

The operating company, Klosters-Madrisa Bergbahnen AG, is setting new standards with



the CS10 chairlift and making the sector sit up and take notice. The 6-seater Schaffürggli chairlift is the first installation in Switzerland with the child-friendly chair model CS10 and is also equipped with bubbles and seat heating. In the Madrisa ski area, it is now possible for one adult to ride on one chair with up to five children with a body height exceeding 90 cm, and ski schools are not the only ones to be impressed. A loading conveyor which can be raised helps skiers to board independently. "In addition, the new lift addresses something which is very close to our hearts – it fully addresses our desire to enable visitors with impaired mobility to enjoy an unforgettable winter sports experience," explains Hacher Bernet, CEO of Klosters-Madrisa Bergbahnen AG.

Building the new lift proved to be a logistical challenge as there were several projects under

"The new CS10 chairlift is a great attraction for our most important group of guests, namely families with children and ski schools."  
Hacher Bernet,  
CEO of Klosters-Madrisa  
Bergbahnen AG



construction on Madrisa Mountain at the same time. In addition to the chairlift, the operating company invested in a new snowmaking installation and a new self-service restaurant in summer 2016. [↓](#)



### 6-CLD-B Madrisa-Schaffürggli

Location	<b>Klosters, Graubünden (CHE)</b>
Owner	<b>Klosters-Madrisa Bergbahnen AG</b>
Lift type	<b>Detachable 6-seater chairlift with bubbles, seat heating, automatic restraining bar closure</b>
Capacity	<b>2,600 PPH</b>
Speed	<b>5.0 m/s</b>
Carriers	<b>98 chairs</b>
Inclined length	<b>1,891 m</b>
Vertical rise	<b>509 m</b>
Construction	<b>May through December 2016</b>




# Ski resort development from a single source




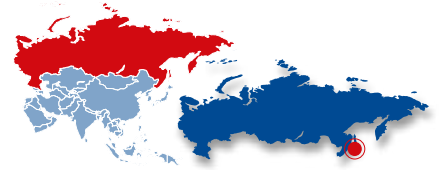
In its role as general contractor, Doppelmayr has helped to upgrade an entire Russian resort in record time while overcoming geographical challenges.

Since 2016, two new ropeway installations in Russia's Far East have meant a major modernization of the recreation and leisure area around the city of Yuzhno-Sakhalinsk. Doppelmayr Russia won the contract due to its vast experience and a fair price-performance ratio. The Olympic installations in Sochi also provided an important reference. Despite being located 7,000 km away with a ten-hour time difference, the ropeway professionals from Samara, acting as general contractor, completed two detachable chairlifts in the space of a few months and provided their full support from the planning stage all the way through to

completion. Back in 2007, Doppelmayr had already demonstrated its ability to deliver with a world first in Yuzhno-Sakhalinsk: the first combination lift with two sections, where the cabins travel through from the lower to the upper section.

The latest quad chairlifts with bubbles and individual footrests run during both the winter and summer seasons. The operating crews were trained by Doppelmayr during the start-up phase. Several new trails have been created for the winter skiing season and plans for the further development of the ski area are in the pipeline. 

 Take a look at the ski area here:



## 4-CLD-B Gorny Vozdukh Lift C

Owner	<b>STK Gorny Vozdukh</b>
Location	<b>Yuzhno-Sakhalinsk, Sakhalin (RUS)</b>
Inclined length	<b>882 m</b>
Vertical rise	<b>307 m</b>
Capacity	<b>2,000 PPH</b>
Speed	<b>5.0 m/s</b>
Trip time	<b>3.3 min</b>
Carriers	<b>55 quad chairs with bubbles and individual footrests</b>

## 4-CLD-B Gorny Vozdukh Lift D

Owner	<b>STK Gorny Vozdukh</b>
Location	<b>Yuzhno-Sakhalinsk, Sakhalinsk (RUS)</b>
Inclined length	<b>1,542 m</b>
Vertical rise	<b>398 m</b>
Capacity	<b>2,000 PPH</b>
Speed	<b>5.0 m/s</b>
Trip time	<b>5.48 min</b>
Carriers	<b>91 quad chairs with bubbles and individual footrests</b>

"In our view, Doppelmayr is the absolute world market leader, and over the years that's been borne out by spectacular projects not only in Sochi in 2014 but also in other regions in the Russian Federation. In the case of Gorny Vozdukh, the Doppelmayr ropeways have been successfully operating since 2008. All the installations have been built on schedule within a very short time frame and the quality has always been perfect. We can already say with certainty that we definitely made the right choice! "

**A.W. Zaytsev, Minister of Sport and Youth Policy in the Sakhalin Region**





## More capacity and comfort on the Klausberg



Built in record time, the new 10-passenger gondola lift, K-Express, offers top comfort and carries up to 2,800 passengers an hour.

The Klausberg ski area in South Tyrol has recently added a new 10-passenger gondola to its lift infrastructure. It replaces a Doppelmayr ropeway which operated all year round for a total of 20 years. The modernization of the feeder lift was necessary because of the large volumes of passengers. The new installation with spacious cabins brings up to 2,800 passengers an hour into the ski area and also offers room for the transport of baby

strollers and mountain bikes. The integrated ski holders and significantly enhanced loading and unloading comfort provide additional benefits.

While the new bottom station has retained its original location, the top station has been moved 15 meters to enable easier access to the lift for guests, who now enjoy getting to the slopes in less time. The time taken to build the K-Express has to be a record. Doppelmayr completed the new gondola lift in just three months without interrupting either winter or summer operations. 📌



### ⚙️ 10-MGD K-Express

Owner	<b>Klausberg Seilbahn AG</b>
Location	<b>Bruneck, Bolzano (ITA)</b>
Inclined length	<b>1215 m</b>
Vertical rise	<b>550 m</b>
Capacity	<b>2,800 PPH</b>
Trip time	<b>4.3 min</b>
Speed	<b>6.0 m/s</b>
Carriers	<b>40 cabins for 10 passengers each</b>
Opened	<b>Summer 2016</b>

"The gondola lift is bigger and offers higher capacity. Consequently, our guests enjoy top comfort and our ski area is much more attractive."

**Walter Fischer,**  
CEO of Klausberg  
Seilbahn AG



## One ropeway, two functions



The new Albigna reversible aerial tramway in Bergell serves a company as well as providing a means of transport for tourists.

The new aerial tramway in Bergell is an unusual project because it simultaneously serves two purposes. It not only provides company

transport for the Bergell power company, but also carries tourists. The tramway operates 24/7/365 and therefore has to provide maximum availability. A specially developed quick-change coupling allows the tramway to be readily converted from a material transport system for heavy loads of up to 5,000 kg into a passenger tramway within a short space of time. That is essential for Bergell's tourism sector because the view from the Albigna dam is quite spectacular.

Due to the fact that the tramway is indispensable for operation of the Bergell power station, the interruption of tramway operations had to be minimized. Doppelmayr/Garaventa was able to complete the work in just four months. The Albigna tramway has an integrated recovery concept with two emergency drives. 📌

"We were entirely satisfied with Garaventa's performance."  
**Andres Fasciati, Head of the Bergell Power Plant**



### ⚙️ 8-ATW Pranzaira-Albigna

Owner	<b>Elektrizitätswerk der Stadt Zürich (ewz)</b>
Location	<b>Vicosoprano in Bergell (CHE)</b>
Inclined length	<b>2,440 m</b>
Rope diameter	<b>39 mm, two track ropes per path of travel</b>
Vertical rise	<b>901</b>
Plant operation	<b>15 passengers</b>
Tourist operation Capacity	<b>8 passengers</b>
Passenger transport Capacity	<b>94 / 50 PPH</b>
Material transport	<b>30 t/h</b>
Payload	<b>5,000 kg</b>
Speed	<b>7.0 m/s</b>
Trip time	<b>7.6 min</b>
Towers	<b>3</b>
Lower terminal drive	<b>192 kW</b>



# Gassner Stahlbau: the experts for ropeway components

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The Vorarlberg-based family business, Gassner Stahlbau, has been manufacturing high-quality ropeway parts for Doppelmayr since 1970.



**W**hen it comes to ropeway parts such as chairs, towers, cabin hangers or special steel constructions, Gassner Stahlbau GmbH in Bürs has served Doppelmayr as a reliable partner since 1970. The specialist for tube bending and roll-forming, which has been part of the Doppelmayr Group since 1998 and supplies everything from one source from the raw material through to the chair, today employs some 200 people. Technology and methods at Gassner, such as steel construction using robotic manufacturing systems and the very latest measuring techniques, are state of the art. As part of the quality control and quality

assurance process, for example, components such as towers are measured in 3D. Polyurethane components for ropeway chairs are made by Gassner in their own foam production facility. The required tooling and molds also come from the factory in Bürs.

#### The new benchmark

An important milestone for Gassner was the development of the D-Line chair and its modular design concept, in which the company played an instrumental role. The D-Line chair uses more standardized parts, which enables Doppelmayr to respond to requirements and deliver with greater speed. The D-Line compo-

nents are state of the art and optimized for the purposes of material requirements planning and production.

Gerhard Gassner has been the company's managing director since 2004 and continually invests in the company's production facilities, most recently in a robot, which performs the automatic production of hanger arms and cabin frames. Cooperation with Doppelmayr is now closer than ever – whether it's a case of coordinating capacities, providing mutual support or agreeing on machinery procurement. The geographical proximity is a major benefit in this context.





The many years of know-how and the wide range of manufacturing possibilities make Gassner Stahlbau the specialist in the production of ropeway towers and special constructions of the Doppelmayr/Garaventa Group.

“In view of the required level of quality and precision, the manufacture of ropeway components is not something that others can readily copy – and that’s an achievement we’re proud of.”

**Gerhard Gassner,**  
Managing Director of  
Gassner Stahlbau



**Experience and precision set the company apart**

The family business set up by Hermann Köberl in 1946 – originally under the name of Hermann Köberl KG – specialized in kitchen and personal weighing scales. Over the course of time, the company acquired its own tool-making shop, a foundry, a galvanizing shop, a stove enameling facility and a wall-covering operation, but increasingly placed its main focus on the manufacture of steel tubing. The company’s many years of expertise in the area of tubular steel furniture brought them their first orders for ropeway chairs in 1970.


Doppelmayr has been the biggest single customer of the present-day Gassner company since the 1980s and has relied on the firm for the manufacture of chairs, towers and cabin hangers ever since, as well increasingly involving them in the development of new carriers and towers. When over 90 percent of the company’s capacity was already made available to

Doppelmayr in the 1990s, Albert Gassner sold his majority stake in the company, which was renamed Gassner Stahlbau GmbH in 1998, to Doppelmayr. For Gassner, the acquisition meant first and foremost security; for the Doppelmayr Group, a gain in know-how in the area of steel construction, bending technology, cutting and welding. | 1

Gassner Stahlbau GmbH		
Headcount	<b>190</b>	
Apprentices	<b>13</b>	
Annual production	<b>450 – 600</b> <b>2500 – 4000</b> <b>1500 – 2000</b>	<b>tubular towers</b> <b>chairs</b> <b>cabin hangers</b>
Annual consumption	<b>6000 tons</b> <b>4000 tons</b> <b>2000 tons</b> <b>50 tons</b>	<b>steel</b> <b>sheet steel</b> <b>tubes</b> <b>polyurethane</b> <b>foam</b>
<a href="http://www.gassnerstahlbau.at">www.gassnerstahlbau.at</a>		




## Vorarlberg innovation award for the 3S curve

On the Penken lift in Mayrhofen, a new development of the 3S technology was implemented for the first time in 2015. Thanks to the special tower construction, tricable gondola lifts from Doppelmayr/Garaventa can now travel along a curve. For this innovation, Doppelmayr was presented with the Innovation Award of the Province of Vorarlberg in fall 2016. This honor is awarded annually for novel, innovative products or processes that create particular added value for customers and users. | 




## Willy Garaventa appointed honorary president

In 2016, the board of directors of Garaventa AG appointed Willy Garaventa, the son of the company founder, as honorary president. He took over the reins from his father, Karl, in 1955. Between 1958 and 1965 alone, the company grew from ten employees to a workforce of 155. As a ropeway man and pioneer through and through, he showed innovative spirit with his own inventions even as far back as the 1950s. The rope winch, which he developed for the expansion of the Seeboden lift near Küssnacht (CHE) in 1957, remained in use until recently. Willy Garaventa was also present at the start-up of every single installation. Most recently, he installed a small cable crane for transporting logs together with some of his ropeway friends – a type of ropeway with which his father laid the foundation stone for Garaventa AG almost 90 years ago. | 


## President Morales is the first passenger on the Línea Azul

On November 20, 2016, Bolivia's President Evo Morales completed the maiden voyage of the Línea Azul ropeway built by Doppelmayr. The new line connects directly to the Línea Roja and is the first Phase II line of the operating company, Mi Teleférico, which will go into public service. Evo Morales was the first passenger to travel from the station 16 de Julio to the UPEA university. A few cabins were unpacked early especially for the trip. The President was visibly impressed: "Thanks go to the Austrian company Doppelmayr – a good ally and a good investment!"

Numerous technological features and new benefits for the city make the new line another highlight of the world's biggest urban ropeway network. The official opening of the Línea Azul for public service is scheduled for spring 2017. | 



## UN-HABITAT: Working together for successful urban development

Half of the world's population – 3.5 billion people – now lives in cities; by 2030, it will be 60%. Although cities only account for 3% of the world's land surface, they are responsible for 60% – 80% of energy consumption and 75% of CO<sub>2</sub> emissions. In view of the growing need for mobility solutions as urbanization increases, Doppelmayr has been working with the United Nations Human Settlements Program, UN-HABITAT, since September 2016. At the Habitat III Conference in Quito in October 2016, Doppelmayr provided information on the many possibilities and benefits that urban ropeways have to offer. | 





## Conference for 180 customers of the Limmern hydropower plant

In August 2016, the Association of Technical Managers for Swiss Ropeways (VTK) joined forces with Garaventa to host a visit to Linthal to see Switzerland's biggest pumped storage hydropower plant. For six years, three heavy-duty ropeways have been operating at the power plant construction site. This provided a unique opportunity to experience the spectacular performance of these three installations at first hand before the two construction tramways 1+2 are dismantled. The funicular is to be retained.

During the three-hour tour, the 180-strong party traveled up to the Lake Mutt reservoir and back to the base through the tunnel. As well as the heavy-duty ropeways and their machinery rooms, the visitors were shown the one-kilometer-long dam and the impressive power plant cavern. | [1](#)



## 26 new apprentices at Doppelmayr

At the beginning of September 2016, 26 new apprentices at Doppelmayr in Wolfurt took their first steps towards careers in the electrical and metal trades. Doppelmayr currently employs a total of 94 apprentices at its Wolfurt site. Since the company's own apprentice workshop was set up in 1979, 616 apprentices have completed their training – and some 365 of them continue to work at the plant to this day. Doppelmayr has held the title of "Distinguished training company" (Ausgezeichneter Lehrbetrieb) ever since the Province of Vorarlberg established the award. In the Apprentices' Skills Competition, Doppelmayr apprentices continually rank among the best in Vorarlberg's electrical and metal industries. | [1](#)



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



## D-Line: Welcome to first class

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**Safety and quality combined in modern design.** The D-Line is ropeway technology optimized in form and function, and a highlight in terms of comfort. The next ropeway generation from Doppelmayr impresses all along the line.