

With prize draw
3 iPods to be won
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Wir



Dubrovnik's new aerial tramway links the old quarter of the city with Srdj, its local mountain, which also boasts a new restaurant and new amphitheater. p.10



Single-track Funifor for Bezau (Austria)

A boost to the region's attractiveness for summer and winter tourism. p.2

Funicular in the South Tyrolean Dolomites

Comfortable ride from St. Ulrich in Val Gardena to the Puez-Odle Nature Park. p.6

Two world-record ropeways in the Swiss Alps

Transportation for loads of up to 40 tons. p.12

Singapore's gondola lift sparkles like the stars

"Jewel Cable Car Ride" with high-tech touch and many world firsts. p.14

An alpine village in Korea

Venue in bid to host the Winter Olympics 2018. p.16

Enhanced comfort in the stations

Gondolas raised up several levels within a very narrow footprint. p.18

The BUGA lift in Koblenz carried its first passengers at the beginning of July 2010. It links the right and left banks of the River Rhine at "Deutsches Eck", where the Rhine and the Moselle converge. p.4

 **Doppelmayr®**

Magazine for
Customers and Employees

Context-sensitive design



Doppelmayr has built Austria's first Funifor from Bezau in Bregenzerwald (Austria) to the slopes of the majestic Winterstaude (1,800 m).

The Funifor replaces a two-section, 55-year-old aerial tram which was no longer able to meet capacity requirements. In addition, the concession for this ropeway connection was due to run out in 2014.

Bezau's municipal council saw this as the opportunity to do the job properly. They didn't stop at replacing the tram but decided that an exclusive 400-seater panorama restaurant with conference facilities would attract new target groups to the village. This meant providing a convenient shuttle service.

Windy conditions prevail near the mountain crest – much to the delight of paragliders and hang-gliders. And all the more so if they can conveniently pack their equipment onto a ropeway! In strong winds, however, operations had to stop. This was often the case on the upper section of the tram. Hikers simply took it on the chin. All they had to do was walk on to the mid-station. "But you can't expect guests who just want to use the restaurant or attend a conference to put up with that," explains Fidel Meusburger, Managing Director of Bezauer Berg-



The ropeway is not the only striking development. Both the station buildings and the mountain restaurant are ultra-modern in design and their architecture blends in perfectly with the surrounding landscape.

bahnen. The new installation had to be wind-resistant.

Wind stability is trumps

It was decided that a Funifor would be the best solution. As well as offering particular wind stability, this ropeway system would double capacity. That meant no more excessive waiting times.

As Fidel Meusburger goes on to explain, the new ropeway has also given a boost to the Andelsbuch/Niedere region on the other side of the mountain

ridge. This is thanks to a convenient ski trail link which was constructed at the same time as the Bezau Funifor. And the latest addition is an awesome toboggan run, created by simply converting the temporary access roads. This has proved to be a hit among locals and tourists alike.

Key benefits of the Bezau Funifor:

- Extreme wind stability
- Short hangers, therefore compact, low station buildings
- Spliced haul rope loop, maintenance friendliness



Management of the Bezau operating company goes back a long way in the Meusburger family. The father was the first managing director of the two old ropeway installations. As a member of the municipal council, son Fidel (photo) was on the Supervisory Board for many years and has been managing director since 1997.



Architect duo Bernd Frick and Markus Innauer have won kudos for this outstanding achievement.

60-FUF Bezau

Transport capacity	345 PPH
Trip time	5.2 min
Speed	12.0 m/s
Cabins	1
Inclined length	2,170 m
Vertical rise	930 m
Towers	2
Drive	Bottom
Haul rope Tensioning	Bottom

The necessity for "effective" innovation

Innovations have to be effective, in the sense of market-oriented and market-driven. That calls for good ideas, courage and will power. – These are all characteristics that ropeway operators need in abundance if they are to rapidly adapt to market trends, or even get one step ahead and actually set the trend.

Doppelmayr/Garaventa engineers also think outside the proverbial box and are more than capable of a fast and flexible response to new requirements. Customers state their goals, and then it's our job to find the right path to achieving them.

Strictly speaking, every Doppelmayr/Garaventa installation is designed specifically for the customer and is therefore a one-off. Many attract particular attention among the general public because of their size, design or unusual approach. Recent examples include the world's biggest heavy-duty ropeways in the Swiss Alps, the tricable ropeway for urban transport in Koblenz (Germany) or the gondola lift crossing the port of Singapore. The list of effective ropeway innovations developed by the Doppelmayr/Garaventa Group could be continued at length.

We see top-quality innovations as part of our core mission. The success of those innovations is decided by our customers. Their willingness to cooperate cannot be valued highly enough.

Michael Doppelmayr



Koblenz: Efficient city ropeway

The German city of Koblenz (population 106,000) has a new, efficient means of transport: the BUGA ropeway across the Rhine.

The lift is destined for Rhineland-Palatinate's Federal Horticultural Show Koblenz 2011, known as BUGA, (April 15 to October 16). The show has three core areas: the Electoral Palace on the inner-city bank of the Rhine, the Blumenhof courtyard at Deutsches Eck – the meeting point of the rivers Rhine and Moselle – and the Ehrenbreitstein Fortress on the opposite bank of the Rhine.

Construction began in mid-April 2009. The stations and towers were completed in December 2009 and rope installation went ahead at the end of January 2010. The first nylon rope was flown by helicopter from the top station to the right bank of the Rhine. The next two steel auxiliary ropes were ferried across the Rhine by pontoon. For this operation, the river had to be closed to shipping for four hours. Traffic closures were also necessary for the construction of protective scaffolding over the busy freight rail line (from 10 pm to 4 am) and a federal road (for a short period).

Ecologically sound solution

Experts have praised the gondola lift for its ecological and economic benefits over a bus shuttle service.

Doppelmayr is lift operator

The lift opened to the public on July 4, 2010 to coincide with the 3rd BUGA topping out celebration. Doppelmayr will operate the lift initially until October 4, then again during the Horticultural Show. In 2012 and 2013, it will be in service from April to October. Removal is planned for November 2013 to avoid jeopardizing the region's status as the UNESCO World Heritage Site "Upper Middle Rhine Valley".

Hundreds of thousands of flowers

Three thousand events are planned for the Federal Horticultural Show, and 300 trees as well as hundreds of thousands of flowers have been planted.

World premiere: New evacuation concept

In view of the long stretch over water, an evacuation system has been developed which does away with the need for a separate rescue ropeway. It ensures that the cabins can always be returned to the stations under any circumstances.



The Federal Horticultural Show runs for six months and is expected to attract two million visitors. The lift will also be in service during the summer months of 2012 and 2013.



Rhineland-Palatinate's Premier Kurt Beck (right) after his first trip on the new BUGA lift in Koblenz:

"You can see that I'm excited – it's an experience not to be missed!"

Left: Mayor Prof. Dr. Joachim Hofmann-Göttig; behind him, BUGA Chief Executive Hanspeter Faas.

3S BUGA Lift Koblenz

Transport capacity (both directions)	7,600 PPH
Trip time	4.0 min
Speed	4.5 m/s
35-passenger cabins	18
Interval	33.3 s
Inclined length	890 m
Vertical rise	112 m
Towers	2
Drive	Top
Tensioning	Bottom





Modern funicular to the Puez-Odle Nature Park

The Raschötz single-seater chairlift, built in 1952 in the South Tyrolean Dolomites, has been replaced by a modern funicular from Doppelmayr/Garaventa.

The operating company, Sessellift Raschötz GmbH, has realized an ambitious project. Since summer 2010, a funicular has provided access to Raschötz Alm at an altitude of 2,281 m in the Dolomites.

No longer exposed to the elements

For company president and majority shareholder Peter Comploj, there were several reasons for deciding on a funicular. The operating license for the old chairlift had expired. In view of the long, 25-minute trip, an upgrade would not have been approved by the authorities. In the winter months, passengers were exposed to the cold and in the summer ran the risk of a sudden thunderstorm. That meant that a faster and more comfortable means of transport had to be provided.

Funicular proved to be the best solution

The shortlist consisted of a detachable monocabable gondola lift, a reversible aerial tram and a funicular. It soon became clear that the funicular was the best option:

- The line profile was ideal;
- The very limited space available in the bottom terminal wouldn't be a problem;
- Any debate about the height and number of towers could be avoided;
- Viewed over the lifetime of the installation, the operating costs would be lower than with a detachable gondola lift;
- The installation would have a longer service life;
- The funicular would be more cost-effective, particularly as an intermediate station was required.

Peter Comploj explains: "We certainly need an intermediate station so that guests can still toboggan even if there isn't enough snow on the lower part of the slope!"

In the fall of 2009, the old chairlift was demolished and construction got started. The old lift line was retained. The bottom station is located in the center of St. Ulrich, the top station near the Chalet Restaurant Resciesa. The bridge crossing a cleft in the terrain was kept as short as possible to minimize its visual impact on the landscape. A 90-meter-long tunnel immediately above the bottom station improves the quality of life for local residents. The intermediate station is next to the passing loop.

The entire region benefits

The funicular is a key element in the regional infrastructure. As well as its function as a transport link to Raschötz Alm and the Resciesa restaurant at the top terminal, the funicular provides a shorter and easier route to the mountain huts. One of these, the Schutzhaus Resciesa offering 50 overnight bunks, has been rebuilt by the municipality of St. Ulrich.



Company president Peter Comploj expects to see a significant rise in passenger numbers: "With the old lift we sold 110,000 trips over the year. Even based on cautious estimates, we predict that the funicular will bring an increase of at least 70 percent!"

90-FUL Raschötz

Transport capacity	828 PPH
Trip time	4.5 min
Speed	10.0 m/s
Inclined length	2,388 m
Vertical rise	822 m
Drive	Top



The "Zugele" from St. Ulrich in Val Gardena (Gröden) to Raschötzer Alm is an extremely attractive transport link. During the project engineering stage, special attention was focused on maintaining the visual impression of the landscape, particularly as the funicular runs along the

edge of the Puez-Odle Nature Park, which is a Natura 2000 site. (Natura 2000 is a Europe-wide network of sites tasked with the preservation of natural heritage). The control system for the funicular was supplied by Doppelmayr Italia, the ropeway hardware by Garaventa.

Bilbao Metro: Service frequency to suit demand



A new funicular has gone into operation in Santurtzi, 17 kilometers north of Bilbao. It links the subway with the district of Marmariga.

Bilbao is one of the largest cities in northern Spain, with a metropolitan area of almost one million inhabitants. Santurtzi has a population of 50,000 and lies on the coast at the end of Bilbao's subway system, the "Metro". The new funicular connects the higher-lying urban districts with the Metro.

The timetable is geared to the required service frequency

The Metro is a very popular means of transport. Some 275,000 passengers use it on a daily basis. What makes it so appealing is the way in which service frequency is rapidly adapted in line with actual demand.

The same applies to the new funicular. The train service runs according to a fixed schedule. Nonetheless, the cabin departs once it is 80 percent full as occupancy is automatically counted. The next cabin is then put into service shortly afterwards.

Fully tunneled and low on noise

The funicular runs underground. To ensure maximum availability, there are two parallel, independent tracks. The drives of

the two cabins are independent of one another. Automatic rail lubrication ensures silencing as well as reduced wear. Thanks to the mono-wheel carriages, it has been possible to save weight and therefore drive energy.

Battery operation in the event of power outage

The cabin can be driven uphill using battery power if a power outage occurs.

The funicular was purchased by the City of Bilbao and is operated by the Metro (Consorcio de Transportes de Bizkaia). Doppelmayr Spain (Transportes por Cable) was awarded the contract and Garaventa supplied the funicular.

Funicular railways

Funiculars are wind-stable and are not susceptible to weather conditions. High transport capacities can be achieved with trains consisting of one or more vehicles which carry up to several hundred passengers and travel at speeds up to 14 m/s.





Despite having a fixed train timetable, another service is added as soon as one cabin is full.

45-FUL Bilbao

Transport capacity	550 PPH
Trip time	2.0 min
Speed	6.0 m/s
Inclined length	353 m
Vertical rise	44 m
Drive	Top
Counterweight	Bottom

"Fosterinos" is the name Bilbao's inhabitants have adopted for their tubular subway stations made of glass and steel. This is derived from internationally renowned architect Sir Norman Foster, who created the design. (His prestigious projects include the new Reichstag building in Berlin).



Dubrovnik: Old tradition – new tramway

The Croatian coastal city Dubrovnik sees the return of one of its iconic landmarks: the aerial tram to Mount Srdj. It was originally built in 1969 and has been restored by Garaventa. On July 10, 2010, the first tourists once again rode up to the historic summit cross¹.



The aerial tram goes to the ruins of the Imperial Fortress dating from the 18th century. They are situated on Brdo Srdj, which rises up from the coast. Whereas the old cabins previously carried 15 passengers, the new ones can now take 30 passengers on each trip.

The unforgettable view of the old town and the surrounding islands makes the tram ride one of Dubrovnik's most spectacular attractions. Visitors should be given the opportunity to enjoy it in full. For this reason, the tram usually runs in the leisurely eco-mode, rather than at normal speed.

Unspoiled historic cityscape

A major focus of the tram restoration was to retain the overall visual impression of the surroundings as the lower station is located on the edge of the historic old town, a UNESCO World Heritage Site.

¹ A gift from Napoleon Bonaparte.

30-ATW Dubrovnik

Transport capacity 470 PPH

Trip time

Normal operation 3.0 min

Eco-mode 3.5 min

Speed

Normal operation

Line 6.5 m/s

Tower 5.5 m/s

Eco-mode

Line 6.0 m/s

Tower 5.0 m/s

Station approach reduced speed

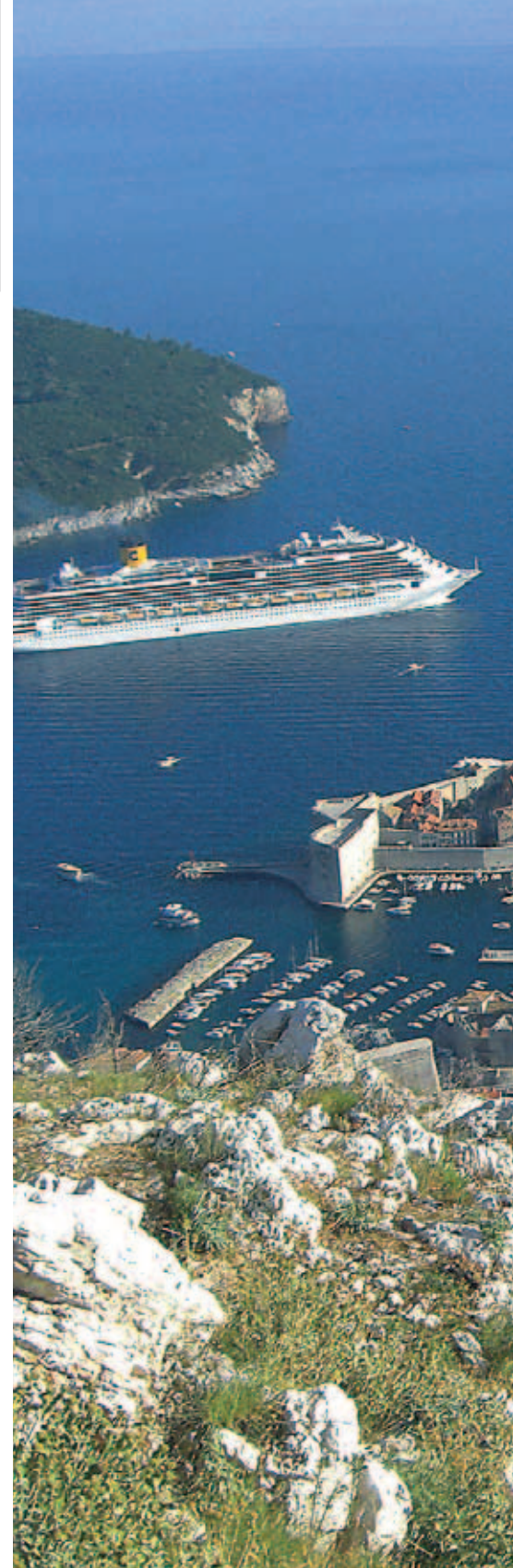
Inclined length 778 m

Vertical rise 367 m

Towers 1

Drive Bottom

Tensioning Bottom



At the same time, there was no way round replacing virtually everything, with the exception of the façade of the bottom station and the tubular tower. A saddle construction for the carriage of the cabin was added to the bottom station. The drive system was accommodated in the existing machine room. The cabin bay was enlarged and the existing counterweights upgraded. The top station, on the other hand, was so badly damaged that it could not be reused.



The cabins feature a special paint finish in brilliant orange. They blend in perfectly with the rooftops of the historic old town.

Café and amphitheater on the mountain

The new top station incorporates two panorama terraces and a souvenir shop as well as a café with snack bar.

Built onto the top terminal is an amphitheater which seats 250 people. The opening of the tramway and the amphitheater

coincided with the 61st Dubrovnik Festival (July 10 – August 25). The festival is famous for its extensive program of theater events as well as its classical and modern music.

Difficult rope installation

Installing the rope was not easy as the

rope line crosses the central access road into the city and a tight timeframe had to be upheld. Because the tower is well visible from the city, its outer appearance was to be changed as little as possible. Its rocky location is only accessible via a steep footpath. For this reason, the Garaventa crew built a small material ropeway to install the new rope saddles.

World-record ropeways for hydropower plant construction



In May, less than six months after the first, the second heavy-duty ropeway went into operation at the construction site of the new 1000 MW pumped storage hydropower plant Limmern in the Glarus Alps (Switzerland). These identical-build ropeways are the lifeblood of the Linthal 2015 construction project. Once the construction work for the hydropower plant has been completed, the ropeways will be removed.

The giant combined power generation system is set to produce 1,480 MW of electricity from 2015, which is three times the current level.

Hundreds of thousands of tons of material

There are more than ten building and installation sites operating simultaneously on the mega construction site. From the base installation site Tierfehd (altitude 800 m), ropeways provide the only means of reaching the building sites higher up. The installations "Construction Ropeway 1" and "Construction Ropeway 2" have been built specifically for this purpose. The first can transport loads of up to 40 tons (Construction Ropeway 1), the second up to 30 tons (Construction Ropeway 2). In addition, each system has a 40-passenger cabin for transporting personnel.

Loads are transferred onto special trucks in Chalchtrittli, the upper terminal of Construction Ropeway 1. From there, the transport route continues underground along a tunnel to the lower terminal of Construction Ropeway 2, three kilometers away. The second ropeway

In addition to machinery and construction materials there are huge volumes of excavation waste to be transported. For the construction of the underground power station alone, there are 500,000 tons of rock to be removed. This material is transported to Muttentalp where it is used to build the dam.

Demanding ropeway construction

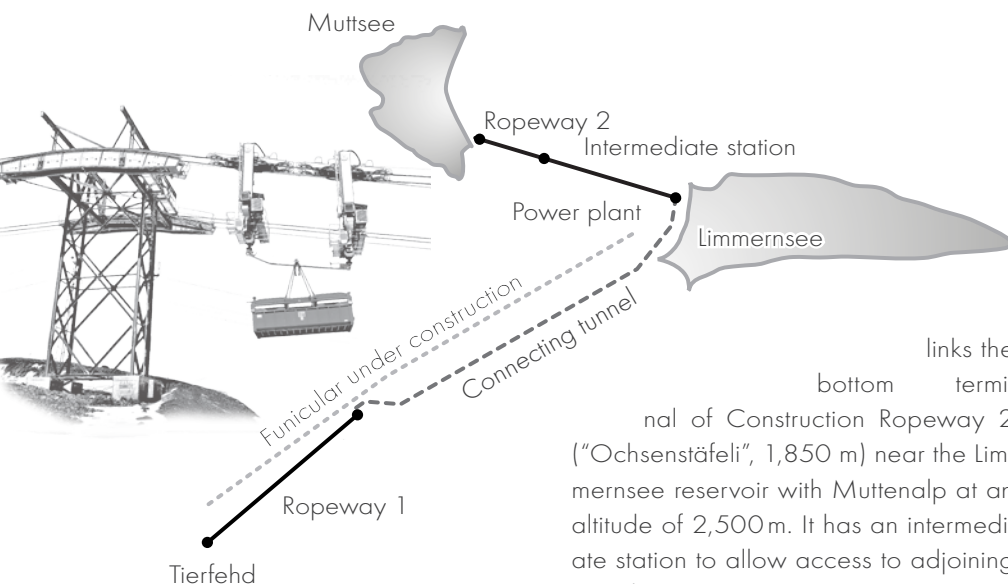
When it came to installing the ropes for Construction Ropeway 1, the eight 114-ton reels holding the track ropes were brought to Tierfehd by special vehicles. The auxiliary rope was flown to Chalchtrittli by helicopter. In Tierfehd, the track ropes for Construction Ropeway 2 were unwound from the reels and pulled via Construction Ropeway 1 to Chalchtrittli, then through the tunnel to Ochsenstäfeli. The operations for installing the ropes for the second ropeway were performed in the same way as for the first.

Helicopters were also used for the concrete work and steelwork assembly for the stations and towers of Construction Ropeway 2.

Funicular to transport transformers

In order to be able to transport the vast transformers – each weighing well over 200 tons – to the underground control center, a funicular is to be built from Tierfehd. A tunnel to the bottom terminal was excavated for this purpose in 2009/10. This installation will remain in operation after completion of the construction work for maintenance of the hydropower plant. The funicular will be built by Garaventa and is scheduled for completion in 2012.

The overall project management was handled by Garaventa Schwanden, the project engineering for the ropeway and the rope installation were performed by Garaventa. Inauen-Schättli carried out the ropeway installation.



links the bottom terminal of Construction Ropeway 2 ("Ochsenstäfeli", 1,850 m) near the Limmernsee reservoir with Muttentalp at an altitude of 2,500 m. It has an intermediate station to allow access to adjoining tunnels.



For Rolf Baumann,
Transport Operations
Manager,
reliability is key.

The ropeways operate in three shifts
throughout the summer and winter.

Construction Ropeway 1 Tierfehd – Chalchtrüttli

Transport capacity	100 t/h
Payload	25 to 40 t
40-passenger cabin	1
4 track ropes ø	90 mm
Haul ropes ø	
upper	58 mm
lower	30 mm
Trip time	7.1 min
Speed	5.0 m/s
Inclined length	1,922 m
Vertical rise	1,051 m
Towers	2
Drive	Top
Nominal power	1,150 kW
Fixed anchoring	Bottom + Top

Construction Ropeway 2 Ochsenstäfeli – Mutsee

Transport capacity	100 t/h
Payload	25 to 30 t
40-passenger cabin	1
4 track ropes ø	90 mm
Haul ropes ø	
upper	58 mm
lower	35 mm
Trip time	6.4 min
Speed	5.0 m/s
Inclined length	1,771 m
Vertical rise	596 m
Towers	5
Drive	Top
Nominal power	1,160 kW
Track rope Tensioning	Bottom





The cable car operators are convinced that they will be carrying up to 1.7 million passengers a year in the foreseeable future.

National symbol in Singapore

After 35 years of service, the iconic cable car linking Singapore's mainland with Sentosa Island was beginning to show its age. It has now been replaced by a lavishly equipped 8-MGD from Doppelmayr.

Since opening in mid-July, the new lift is a must for every tourist who visits Singapore.

The bicable ropeway built by Von Roll in 1974 and subsequently modernized at various times has been replaced by a new lift system. At the press conference to mark the reopening, Ms Susan Teh, CEO of the Mount Faber Leisure Group, said: "This is more than a milestone for our company and Singapore's tourist industry. It's a national symbol."

Huge interest

The modernization was necessary to accommodate the huge increase in passenger traffic: every month, one million tourists visit Singapore. Many of them want to enjoy the attractions on Sentosa. The total capacity of all means of transport was simply no longer sufficient. The gondola lift has three stations. The drive station is located on Mount Faber, a hill covered



in lush tropical vegetation on the mainland.

15th floor stop-off

The intermediate station is situated on level 15 of HarbourFront Tower Two. Close by is the VivoCity shopping mall with subway connection, a large number of bus stops and the terminus of the Sentosa Express monorail. The stations of the old bicable gondola lift have been rebuilt. Steel structures have been set on the solid concrete tower foundations of the old lift. The new, three-armed lattice structure of the Pulau Selegu tower on the coast of Sentosa has increased



The Jewel LEDs of the gondolas sparkle like gems against the night sky – inspiring the name Jewel Cable Car Ride.

in height from 85 m to 115 m. The twin-shaft Seah Im tower between the Jewel Box and HarbourFront is now 85 m high. Cabin parking is provided in the two end stations.

Sky dining at dazzling heights

The well-ventilated gondolas have large panoramic windows and flip-up seats. Tables are provided in the cabin for evening Sky Dining™. These can be readily fixed in place and removed. The 7-Star VIP Jewelled Cabin is encrusted with Swarovski crystals inside and out. It also has a crystal panel glass floor, leather upholstered seats, a mini-bar and an iPod/iPhone docking station with sound system. The mainland station is integrated into a sparkling restaurant and shopping complex, known as the Jewel Box. The Sentosa Island station has a souvenir shop and snack bars.

The harbour had to be closed for in-

stallation of the rope. Two lightning protection cables have been fitted above the haul rope. One has aviation marker balls, while the other is used for data transmission (such as for the cabin information and PA systems).

Stress-free evacuation procedure

A standard rescue procedure would not be possible over water. For this reason, a whole series of measures (back-up systems) have been implemented to avoid the need to evacuate passengers from the line. In collaboration with the Singapore Army, a rescue carrier has been developed which would be flown to the cabin by helicopter in a worst-case scenario. In addition, Doppelmayr has set up a practice rig at the airbase consisting of two towers, original ropes and an original cabin to enable emergency service crews to perform regular rescue drills.



8-MGD Jewel Cable Car Ride

Transport capacity	2,800 PPH
Trip time	8.1 min
Speed	5 m/s
Cabins	93+1
Interval	10.3 s
Inclined length	1,727 m
Vertical rise	46 m
Towers	9
Drive	Mainland
Tensioning	Sentosa

An alpine village in Korea

Doppelmayr has installed three chairlifts in Alpensia, a brand-new resort situated two hours' drive away from the South Korean capital Seoul. The region is bidding to host the 2018 Winter Olympics.



PyeongChang was shortlisted as a candidate for the 2014 Winter Olympics, but finally lost out to Sochi and is now hoping to host the Games in 2018. If this latest bid proves successful, the Alpensia resort will be transformed into PyeongChang's Winter Olympic Park.

Alpine flair to attract guests

Construction of the one-billion-euro Alpensia project began in 2006. The work was completed in summer 2010. The resort sees itself as an all-year sports and recreation center for tourists, offering alpine and cross-country skiing over an area of 5.5 km² in the winter, and golf (47-hole course), tobogganing, hiking in the Taebaek Mountains plus a broad range of wellness facilities in the summer (PyeongChang means "peace and prosperity").

The resort is particularly proud of the architecture of the newly built 238-room hotel. It is based on the style of Alpine villages found in Austria and Switzerland – hence the name Alpensia, created by combining the words "Alps" and "Asia".

World-class winter sports facilities

The Governor of Gangwon Province praised Alpensia during the 2014 Olympic bid for its "world-class facilities for alpine races, ski-jumping, biathlon and cross-country competitions". The resort boasts 5.5 km of ski trails covering an area of 20 ha.

The three Doppelmayr chairlifts – two 6-CLDs and a 4-CLD – have an hourly transport capacity of 8,570 passengers¹. For the summer toboggan run, the toboggans themselves are hooked onto the carriers of Lift No. 2. The lifts have a parking facility in the bottom station – a feature not commonly found in Korea. Doppelmayr was subcontractor to the construction corporation Taeyoung Industry, which acted as general contractor.



Popularity boom

The resort is in demand. Skiers and wellness guests are not only drawn from South Korea but also from Japan and China. Alpensia's management expects to see 300,000 visitors a year, including roughly 65,000 skiers and 45,000 snowboarders; the remainder will be summer guests and non-skiers.

¹ There are 14 lifts in total, including six from Doppelmayr and six from Nippon Cable, Doppelmayr's Japanese licensee.



Alpensia hopes to be a venue for the Winter Olympic Games 2018.

6-CLD Lift 1

Transport capacity	3,085 PPH
Trip time	2.6 min
Speed	5.0 m/s
Chairs	44
Interval	7.0 s
Inclined length	687 m
Vertical rise	194 m
Towers	6
Drive	Bottom
Tensioning	Bottom

6-CLD Lift 2

Transport capacity	3,085 PPH
Trip time	2.6 min
Speed	5.0 m/s
Chairs	43
Interval	7.0 s
Inclined length	679 m
Vertical rise	194 m
Towers	6
Drive	Bottom
Tensioning	Bottom

4-CLD Lift 3

Transport capacity	2,400 PPH
Trip time	2.3 min
Speed	5.0 m/s
Chairs	45
Interval	6.0 s
Inclined length	583 m
Vertical rise	78 m
Towers	5
Drive	Bottom
Tensioning	Bottom

Climbing stairs becomes a thing of the past

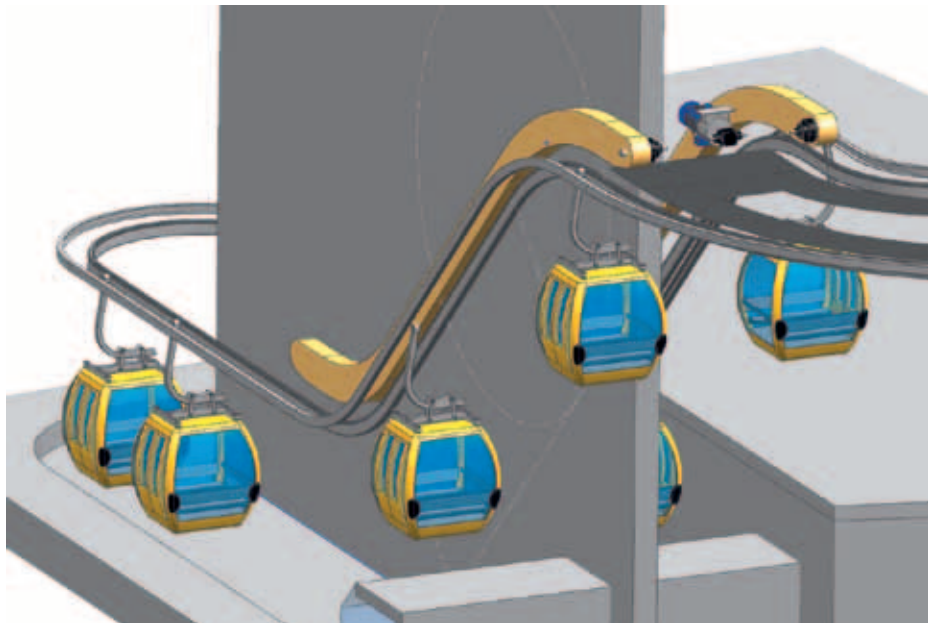
Skiers don't like climbing stairs. When you're wearing ski boots, it's not exactly convenient and may even prove dangerous. – So what is the solution if space restrictions prevent the lift station from being all on one level? – Doppelmayr has the answer: the magic word is "ramp conveyor".

The way a ramp conveyor works is incredibly simple: passengers have level access to the gondolas, which are then raised to the actual launch ramp, passing around corners and curves if necessary.

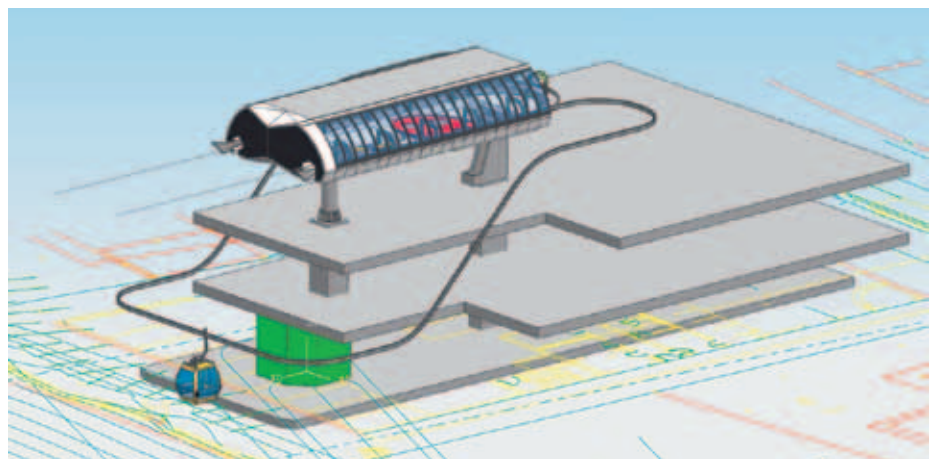
Solutions of this type are tried and tested. One of the most memorable examples is the "Ferris wheel" for the Funitel in St. Anton am Arlberg (Austria). However, the first comparable system for gondola lifts was built as far back as 1992 for the 12-MGD Tracouet Nendaz (Switzerland). This system has been upgraded to state of the art. The space require-

ments for a gondola lift ramp conveyor are amazingly small. An area of 8 m x 4 m is sufficient for gondola loading and unloading. The gondola travels up to the actual station via a silenced, self-supporting structure. When it reaches the station, the gondola is latched onto the Doppelmayr conveyor system. And that's it.

With this ramp conveyor, the lifting height can be up to 12 m, the maximum gradient 45 degrees! By arranging several ramp conveyors in series, it is possible to achieve even greater lifting heights – e.g. 36 m with 3 m x 12 m!



The ramp conveyor from Doppelmayr is ideal for raising occupied gondolas. This system is very well suited to stations in densely built-up urban areas or to stations which are integrated into multi-story buildings with shops, offices, restaurants and service facilities.



Ski fun with Skippy



Hi kids!

It's me again, Skippy! Today I'm going to show you the right and safe way to sit on a chairlift. So please look closely! Then you'll learn what to do - and what not to do.



Backpacks belong on your lap and both ski sticks should be held in one hand, with the tips pointing downwards so that we all get to the top safely.



That's exactly right! Well, there you have it - sometimes kids know better than the grown-ups!



Here I've collected a bunch of stuff for a fun day out in the winter. I've got two of everything - but not quite! There's just one item that's on its own. Can you find it?



Maybe you would like to write and tell me all about the things you notice when you go skiing.
This is my email address: skippy@doppelmayr.com



Skiers storm to Koblenz lift in the July heat.

When the BUGA lift was opened amid glorious sunshine and 32° in the shade at the beginning of July, visitors rubbed their eyes in disbelief: Some 40 high-spirited skiers, kitted out with ski goggles, helmets, woolly hats and earmuffs, made a beeline for the bottom station so that they could all ride up to the Ehrenbreitstein Fortress plateau. They had got together on Facebook to form a cable car flash mob. Unfortunately, the accompanying skis, snowboards and toboggans had to stay outside. As the BUGA gondolas are not approved to carry alpine ski equipment, this cannot be permitted for safety reasons. To thank them for coming up with a great idea and to make up for any disappointment, the "skiers" were given a free ride – and were greeted at the top with a welcome drink!

New arrivals at Doppelmayr zoo



The animals at the Doppelmayr zoo in Wolfurt have a new round of offspring. They include zebras, alpacas, donkeys, kangaroos, raccoons, South American coatis, pot-bellied pigs, Canada geese, pygmy goats and Australian black swans. The zoo houses 62 different species, with several hundred animals in total.

Doppelmayr has been running this zoo since the 1970s. It opens daily and entry



Left: Zoo boss Dietmar Flatz with a baby pygmy goat.
Right: Baby coati.

New Head of After-Sales



Peter Thurner now heads Doppelmayr's After-Sales Service following the retirement of his predecessor, Werner "Jack" Kohler.

By offering fast availability, expertise and a comprehensive range of services from maintenance to spare parts sales, the After-Sales team plays a key role in ensuring that Doppelmayr lifts retain their value.

Prize draw

The quiz question for the September 2010 prize draw is: **In which German city is the Federal Horticultural Show 2011 to take place?** Three iPods are to be won. The judges' decision is final.

Please mail your answer to: **wir@doppelmayr.com** by October 29, 2010, stating "Prize Draw" as the subject.

The correct answer to our prize draw question in issue No. 181 was: Skippy. The following lucky winners have been drawn from the correct answers: Ivo Reichlin, Goldau (Switzerland); Sebastian Fuchs, Bregenz (Austria); the Kaufmann-Inäbnit family, Grindelwald (Switzerland); Walter Bucher, Klagenfurt (Austria); Felix Inauen, Kirchberg (Switzerland). Each wins a digital picture frame. Congratulations to the winners!

is free of charge. The zoo is very popular with families who come from the entire Lake Constance region: Austria, Switzerland, Germany and Liechtenstein.

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