September 2012
No. 188 • 37th Year

Wir

Garaventa has installed the world's first cabrio aerial tramway up to the Stanserhorn, in Switzerland. The double-decker cabins feature an open viewing platform at the top. pp. 10 - 11

London has an urban ropeway. It crosses the Thames and is fully integrated into the capital's public transport network. pp.2-3

Doppelmayr®

Riding high in London

The new gondola lift across the Thames was opened on June 28, less than a month before the start of the Summer Olympic Games in London. It is now an integral part of the public transport network.

The urban ropeway has been exceptionally well received among Londoners and has attracted high praise from the world's media.

The cable car links the ExCel Centre with The O2, originally constructed as the Millennium Dome. Both venues were used for competitions during the Olympics. The cable car, which is named Emirates Air Line after its sponsor, runs from 7am to 9pm.

After his pre-opening ride on the "much-needed" connection across the Thames, Mayor Boris Johnson told the press: "Get on this cable car immediately. It's beautiful, worth every penny and a stunning piece of engineering ."

Customer survey: Excellent result

As the results of our recent worldwide customer satisfaction analysis show, Doppelmayr continues to be seen as the top supplier in the global ropeway market and is valued as a highly competent partner. Ropeway customers across the globe attach great importance to the operational safety and availability of lift installations, a fast response to customer wishes and reliability – and this is where Doppelmayr scores top marks.

We constantly strive to ensure that our innovations address the needs of the respective markets – and our goal is always to satisfy the wishes of all our customers.

Skiers, for example, expect transport systems to meet a different set of requirements to public transport users. Our gondola lift in London recently went into operation. It has already been very well received, just like our urban ropeways in Portland, Koblenz, Toronto, Mexico City, Caracas and in various Algerian cities as well as in Singapore, etc.

Our analysis also shows that we must not slacken in our drive to remain the world's quality and technology leader. That is why we take ideas and suggestions from ropeway operators to heart and will aim to foster an even more intense dialogue in order to further enhance the efficiency and market orientation of our ropeways and all their constituent systems.

I would like to express my sincere thanks to everyone who took part in the customer survey. It is their assistance that enables us to better tailor our offering to the needs and wishes of both ropeway operators and passengers.

Michael Doppelmayr

Never against nature

Dipl.-Ing. Michael Manhart, Managing Director of Skilifte Lech, is seen as the Arlberg's mover and shaker. He is also a man of unwavering principles.

Michael Manhart has had a close connection with ropeways and mountains from a very early age. His grandfather, Sepp Bildstein, is regarded as the founder of the lift business in Lech and Zürs, and built Austria's very first continuous movement ropeway[1]. His mother, Adelheid Schneider-Bildstein, was the grande dame of Skilifte Lech and the life and soul of the company for almost half a century (including 20 years as its highly respected managing director). Michael Manhart studied engineering in Vienna and Stuttgart and was largely influenced by his spiritual mentor Erwin Schneider, honorary professor at the universities of Innsbruck and Lima/Peru, glaciologist, high mountain cartographer, mountain guide instructor and extreme mountaineer, who taught Manhart to develop a "feel for the terrain". This background made Manhart ideally placed to realize his visions for the Arlberg ski region.

[1] With Emil Doppelmayr. Doppelmayr's first surface lift

Michael Manhart, Managing Director of Skilifte Lech, is one of the great pioneers of the Austrian ropeway scene. To mark his 70th birthday, he was awarded the Grand Decoration of Honor in Gold for Services to the Republic of Austria in mid-July. Over the decades, many of his ideas have influenced the development of the ropeway industry.

8-CLD-B Steinmähder, Lech

Michael Manhart began his professional career with Skilifte Lech in 1972 and went on to become managing director in 1984. He has held – and continues to hold – many other functions in ropeway operating companies (including as director of Skilifte Schröcken) as well as in business and environmental organizations.

I'm a "green" ropeway man

Michael Manhart regards being an advocate of green issues as a matter of course: "Sustainable mountain tourism is only possible by working with nature; anyone who thinks they can do the opposite is going to lose out in the end." He goes on to say that there are plenty of examples to prove his point, whether it's a case of integrating endemic plant species into the trails, developing snowmaking equipment, snow grooming vehicles or innovative ropeway technologies such as detachable lifts or seat heating systems.

The ingenuity of Michael Manhart does not stop at any challenge, and many of Doppelmayr's technical innovations have been inspired by his ideas.

"Progress shouldn't have to fit in with outmoded regulations!"

His words certainly don't fall on deaf ears where the authorities are concerned. The philosophy he pursues with determination and excellent arguments can best be summed up as follows:

"Progress shouldn't have to fit in with outmoded regulations. On the contrary, it's the regulations that need to reflect the very latest technological and environmental findings as soon as they are properly verified."

"We are service providers"

Despite all his ingenuity and entrepreneurial spirit, Michael Manhart always keeps the business purpose clearly in mind: "We are service providers," he says. And explains his point succinctly: "We sell enjoyment." While making a profit might be necessary for any company and vital for survival, it is not the sole source of reward.

Shaping the western Arlberg region

Manhart considers himself particularly fortunate in being able to fulfill his dreams on the Arlberg. After all, it was his grandfather who discovered winter tourism and made it accessible to a broad section of society. That heritage carries an obligation. He sees it as his mission to play a role in shaping the western Arlberg region.

6-CLD-B Hasensprung, Lech

8/10-CGD Weibermahd, Lech

Baku has a new landmark

The modernized funicular in the Azeri capital was officially opened by President Ilham Aliyev on May 23, in time for the Eurovision Song Contest.

Originally built in the 1960s, the funicular links the fashionable Baku Boulevard in the old part of the city with a modern residential and business quarter located on a hill above.

The upper terminal is situated in front of Flame Towers, a futuristic high-rise complex consisting of three 190 m towers near the parliament building. The lower terminal is barely a ten-minute walk from National Flag Square and Crystal Hall, which hosted the Eurovision Song Contest 2012, on the shores of the Caspian Sea.

Well frequented

The funicular is well frequented as it provides a practical means of transport for commuters and visitors alike.

The upper terminal offers a fantastic view of the city and the sea. And the entire installation is particularly attractive, from the impressive curved design of the stations and the neat route up the wooded hillside to the shining cabins in a glossy black and silver finish.

A technical and architectural jewel

The funicular has undergone a complete overhaul. Only the curved alignment remains; the haul ropes are held on the track by compression sheaves. Even the old Russian sleepers were replaced with new ones from Switzerland. Hallmark

40-FUL Baku	
Transport capacity	600 PPH
Trip time	3 min
Stopping time in stations	1 min
Speed	3.0 m/s
Carriers	2
Inclined length	432 m
Vertical rise	91 m
Drive 75/210 kW	Top
Tensioning (counterweight/counter rope)	Bottom

First built well over 50 years ago and now completely overhauled, the Baku funicular shone in new splendor for the Eurovision Song Contest. The cabins can carry 28 seated and 12 standing passengers. The stations are elegant steel-glass structures which symbolize the emerging economy of Azerbaijan.

Swiss and Austrian quality is evident all the way through the installation. The funicular was supplied by Garaventa, the cabins by CWA; the architect and the engineering for the steel-glass structures for the stations as well as the glass elements are from Austria.

The time frame for the overhaul was just ten months from signing the contract. Thanks to the excellent collaboration between Garaventa and the local contractors the project was delivered without a hitch.

Witch watching by gondola

Doppelmayr built a 6-passenger gondola lift at the Thale Adventure Park in the heart of the Harz Mountains, where on Walpurgis Night the witches perform their spine-chilling dances. The lift was opened on April 21, 2012.

The "cable car to the witches' gathering" is seen as an emblem of the Harz region. It was the only new build gondola lift in the GDR and was opened in 1970 as a 4-seater bi-cable installation. In 1994, the lift underwent extensive modernization, which included new control technology and new 4-passenger cabins (from CWA).

Increased capacity, boost to visitor numbers

In the peak season, however, the "old lady" suffered from chronic undercapacity. For this reason, she was replaced by a high-capacity Doppelmayr lift featuring panorama windows and designed to accommodate mobility-impaired users. The improvement has obviously met with the approval of the public as passenger numbers have already increased by a third over 2011, which was in itself a record year.

The place where the witches gather to dance, the most well-known location in the Harz after the Brocken, lies on a rock which rises up abruptly more than 400 m from the romantic valley of the Bode, a tributary of the Saale River. The operating company, Seilbahnen Thale Erlebniswelt, has turned this area into a small but well-conceived world of experience. There is also a double chairlift (built in 2005) and the Harzbob all-weather toboggan run as well as fun parks, the Walpurgis Hall dating back to 1901 and the Harzer Bergtheater, Germany's oldest open-air theater.

New lift built in two stages

The actual ropeway itself was installed during the period October 4, 2011 to April 20, 2012. The lift line was retained and the new system built to fit perfectly into the existing buildings. The lift has been operating in the 2012 summer season and modernization of the buildings will go ahead in winter 2012/2013.

The old lift was dismantled by the team of technicians from the Thale Adventure Park, who subsequently joined forces with Doppelmayr to erect the replacement. Operations Manager Jürgen Tietz is extremely pleased with the collaboration with Doppelmayr: "The Doppelmayr fitters were highly motivated. The work we performed jointly went like clockwork and the results are top-notch in terms of quality."

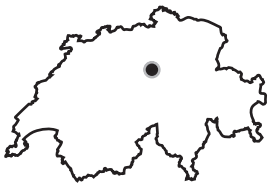
6-MGD Thale	
Transport capacity	1,100 PPH
Trip time	3.5 min
Speed	5.0 m/s
Cabins	21
Interval	19.6 s
Inclined length	728 m
Top station altitude	432 m
Vertical rise	244 m
Towers	5
Drive	Bottom
Tensioning	Top

Cabrio to the Stanserhorn

World first: The first tram cabin worldwide with an open top deck has been in operation on the Stanserhorn since June 28. Passengers look out above the ropes and enjoy an undisturbed view of the stunning Luzernerland.

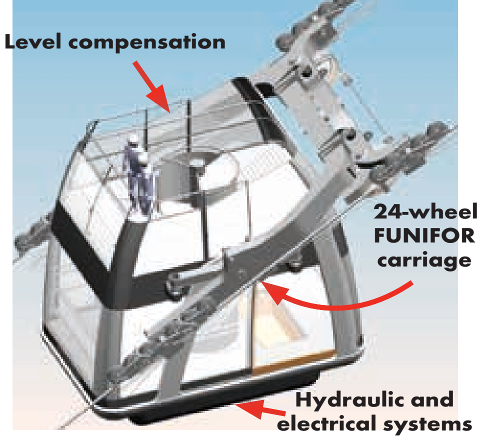
The trip up to the Stanserhorn summit consists of two stages. The funicular is used for the first leg and the aerial tram for the second. Passengers can interrupt their journey and get off at the intermediate station Alp Blumatt. This exit is integrated into a 30 m tower and has a platform at the level of the bottom deck which lowers like a drawbridge. A ramp provides access to the base of the tower.

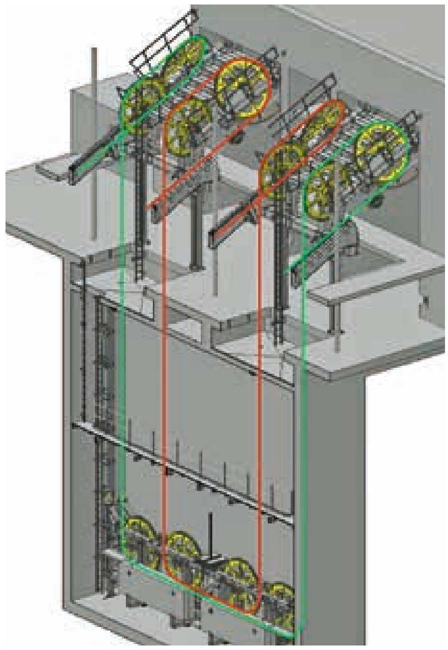
The level compensation system for the cabins is also a world first. Two hydraulic cylinders mounted on either side of the carriages form the heart of the concept. Their purpose is to compensate the longitudinal swing of the cabins. The required hydraulic pressure is automatically charged in the base and top terminals.



Integrated recovery concept – no cabin evacuation or abseiling

All safety-related parts are duplicated. In the event of a failure, the redundant equipment is used to ensure the safe return of the cabins to one of the stations. As a consequence, the passengers do not have to leave the cabin.



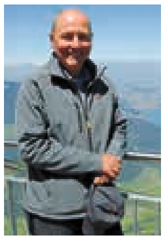


Rope configuration on the FUNIFOR system: two parallel track ropes (red) form the track; the gauge width is greater than the width of the cabin to ensure high wind stability. Two haul ropes (green) – spliced to form a continuous loop – are guided through the lower and upper terminals. (Graphic: Upper terminal of the Stanserhornbahn.)

The double-decker cabin can carry 60 passengers in total. Thirty of them can go up to the viewing platform. Thanks to glazed side walls on the bottom deck, children and wheelchair passengers can also enjoy the view of the 3,000 m and 4,000 m mountains of central Switzerland.

Construction work on the upper terminal was delayed when unstable rock formations were encountered unexpectedly. To ensure that the tram would nonetheless go into service on schedule, up to 35 ropeway fitters were deployed and continued to work into the winter. In view of the large amount of heavy material and equipment to be moved, a second material ropeway was erected during the construction phase and special vehicles normally used for timber transport were deployed.

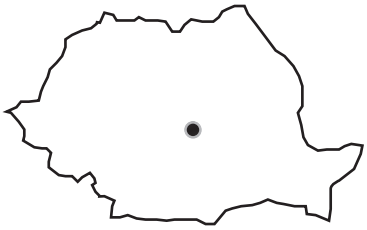
60-ATW Stanserhorn	
Transport capacity	465 PPH
Trip time	6.4 min
Speed	8.0 m/s
60-passenger cabins	2
Inclined length	2,319 m
Upper terminal platform	1,850 m
Vertical rise	1,139 m
Towers	4
Drive 465/910 kW	Bottom
Haul rope counterweight 51 t	Top
Fixed track rope anchoring	Top+bottom



Jürg Balsiger, Director of the Stanserhorn tram company, trusts in the technological leadership of Doppelmayr/Garaventa: "During the course of the invitation to tender, we soon realized that only the technology leader would be capable of meeting the requirements of a double-decker tram." Those expectations were satisfied – and that goes not only for the product and installation quality but also for the professionalism of the support and advice provided. The tram operated smoothly right from the word go without the slightest teething problems.

Two new lifts for Poiana Brașov

The well-known Romanian ski resort Poiana Brașov saw the start-up of two new Doppelmayr lifts: a fixed-grip quad and a detachable 6-seater chairlift with bubbles.



Poiana Brașov now has 11 ropeways providing an hourly capacity of 7,000 passengers. The highest point in the ski area is the upper terminal of the Capra Neagra tram (built by the Doppelmayr/Garaventa Group) on the slopes of the 1,828 m Mount Postavarul.

The region was already known as a destination for skiers as far back as 1905. Today, Poiana Brașov is a modern ski resort with 22 kilometers of trails, luxury hotels, stylish vacation apartments and numerous restaurants. The guests come mainly from Romania and its neighboring countries.

A 4-CLF for athletes in a hurry...

The decision to opt for a 4-CLF for the Lupului trail was based on the following considerations: First, the lift line is short; second, it serves a slope which is primarily aimed at very athletic (and consequently less numerous) skiers who don't mind the lower ride comfort of a fixed-grip chairlift as they are more interested in the specially designed ski trail.

... and a 6-CLD-B for the leisurely skiers

In the case of the Ruia lift, a 6-CLD-B was preferred. Here, the slope is used by skiers of all levels of proficiency and is particularly popular with leisurely skiers. This called for a high-capacity ropeway system with high loading comfort. The operators – Primaria Municipiului Brașov (the local authority) and above all the mayor George Scripcaru – are delighted, especially as the Ruia lift is the first 6-seater chairlift in Romania!

Major logistical challenge

The project – lifts, snow groomers, snowmaking installation with a 110,000m³ pond, trail reconstruction – was largely completed in 2011. Coordinating all the work proved to be a major logistical challenge. The contract was performed by a consortium of companies in which Doppelmayr was responsible for the ropeway technology.

European Youth Olympic Festival 2013

Poiana Brașov is preparing itself for the winter edition of the European Youth Olympic Festival (EYOF) 2013. The competition infrastructure is as good as ready. The Olympic village is being built in Poiana Brașov. The financing is being provided by the EU and the Romanian state.

		6-CLD-B Ruia	4-CLF Lupului
Transport capacity	PPH	2,400	1,808
Trip time	min	3.9	5.3
Speed	m/s	5.0	2.6
Chairs		53	81
Interval	s	9.0	8.0
Inclined length	m	1,081	825
Top station altitude	m	1,720	1,185
Vertical rise	m	375	210
Towers		9	9
Drive		Top	Bottom
Tensioning		Bottom	Bottom

Two operators run the ski area and recently established a ticketing network. This is a pioneering move for Romania as up to now lift users have always had to buy separate tickets for each operator.

It's family time

The new fixed-grip Bonza quad on Mt. Buller, Australia, opened with a family day on June 9. This chairlift is the first in Australia with individual footrests.

Bonza was the only new chairlift to be built anywhere in Australia or New Zealand in 2012 and replaces the Burnt Hut triple chairlift. And because they don't do things by halves in Mt. Buller, Victoria, a new lift line was constructed as well as new additional ski trails in Bonza Country at the same time.

One of Australia's biggest ski regions

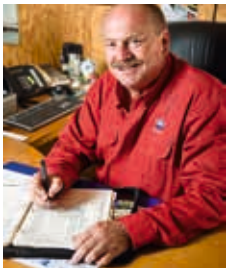
The new Bonza chairlift is located on the wooded northern slope of Mt. Buller. Although rising up to just 1,800 m in altitude, the mountain can be relied upon for abundant snowfall.

Good infrastructure

The ski village can be reached from Melbourne in three hours. It provides accommodation for 7,000 guests as well as offering amenities like shops, banks and a post office, and ranks as one of Australia's biggest ski regions. Not far from Mt. Buller Village lies Mansfield with another 2,300 beds.

The ski area has over 80 km of groomed ski trails, some of them with snowmaking installations, plus 25 lifts.

4-CLF Bonza	
Transport capacity	2,394 PPH
Trip time	3.9 min
Speed	2.3 m/s
Chairs	79
Interval	6.0 s
Inclined length	533 m
Top station altitude	1,664 m
Vertical rise	132 m
Towers	6
Drive	Top
Tensioning	Bottom



Buller Ski Lifts General Manager Laurie Blampied is full of praise for Doppelmayr, who acted as general contractor and was also responsible for the lift buildings. Construction began in March and the lift was ready to go into operation by the end of May. "Mt. Buller has always been a family ski resort and our particularly child-friendly new Bonza Lift serves one of the family-friendliest areas in our region. The opening of this lift was a very special pleasure for us." As well as being one of the biggest ski regions in Australia, Mt. Buller also has the highest number of chairlifts, namely 13.

The bottom station with the drive of the Burnt Hut Lift was struck by lightning and caught fire. Rather than rebuilding the lift originally constructed in 1980, the operating company decided in favor of a completely new lift. A new slope with snowmaking facilities was also added.

The damp sea air which sometimes reaches as far as Mt. Buller can cause severe icing. To prevent the risk of damage to the closing mechanism by frequently having to knock off the ice, the manual closing version of the Doppelmayr chair with individual footrests was chosen. This solution also provides enhanced passenger comfort and good protection against slipping off the seat, which is particularly important for children. The photograph above shows the Federation Triple, built by Doppelmayr in 1981.

Thailand: Tramway to the Elephant Temple

From the terminals and during the ride on the aerial tram, passengers have a fantastic view over the city and far beyond into Thailand's interior. On a clear day, it is possible to see the South China Sea.

The small aerial tram from Doppelmayr enjoys wide popularity in the Thai city of Hat Yai where it provides a great destination for a day out.

Hat Yai lies on the rail line from Bangkok to Singapore, 55 km before the Malaysian border. Its location makes the city a popular destination for day-trippers from Malaysia.

Two sections planned

The second section opened in December 2011 and links the Temple of the Golden Buddha with the Chinese Elephant Temple. The lower terminal is reached via a winding road or by means of footpaths. The yet to be built first section will run from the city park in the heart of Hat Yai up to the Temple of the Golden Buddha on the magnificent Kor Hong Mountain.

Resourceful Thai workers

Section II crosses a valley section which is both deep and wide as well as being covered in dense vegetation. Construction progress was severely hampered by the monsoon rains. But the Thais are used to erratic weather conditions and are also resourceful where tools and machinery are concerned. When it came to installing the ropes, they wasted no time in putting a pile driver normally used for building foundations to this alternative use!

The contract for the construction work was awarded by the local authority as owner and operator. Doppelmayr was responsible for the electrical and mechanical equipment which was supplied in compliance with CE standards.

8-ATW Hat Yai	
Transport capacity	165 PPH
Trip time	2.5 min
Speed	5.0 m/s
Cabins	2
Inclined length	523 m
Vertical rise	57 m
Towers	2
Drive	Bottom
Tensioning	Bottom

Riding the gondola is so much easier than climbing steps

The new gondola lift to the Huong Tich Pagoda in Northern Vietnam went into service in time for the Chinese New Year celebrations 2012. It has already been used by thousands of pilgrims.

The huge numbers of people who make the pilgrimage to this sacred site are overwhelming. Official estimates put the figure at 200,000 for the New Year Festival 2012. This equates to a 20-percent increase over the previous year. The rise in visitor numbers can be attributed to the fact that the way up to the Perfume Pagoda at the top of the mountain is now far more comfortable. Instead of a tiring four-hour ascent which involves climbing up hundreds of uneven stone steps, the shrine can now be reached in a four-minute ride. Many descend back to the valley on foot, passing food and souvenir stands as well as other temples on the way.

The bottom station of the gondola lift is best reached by motorboat in a 20-minute trip across a reservoir built to irrigate the paddy fields in the wide valley. The walk from the landing stage to the gondola lift then takes another half hour – pilgrimages are expected to involve a certain amount of effort and sacrifice, especially by devout Buddhists.

The pathway up stone steps and through thick jungle to the top of Huong Tich with its pagoda is difficult and arduous. The gondola does the journey in just a few minutes. Since the lift opened, tourism in the region has seen a rapid upswing.

8-MGD Huong Tich	
Transport capacity	1,500 PPH
Trip time	3.9 min
Speed	5.0 m/s
Cabins	25
Interval	19.2 s
Inclined length	898 m
Top station altitude	404 m
Vertical rise	291 m
Towers	7
Drive	Bottom
Tensioning	Bottom

High mountain tram in Venezuela

Garaventa is modernizing the four sections of the aerial tramway in Santiago de los Caballeros de Mérida in the Venezuelan Andes. The tram takes passengers up to the Pico Espejo at an altitude of almost 5,000 m – and covers a vertical rise of two and one half kilometers!

The new tram will replace the original installation dating back to 1958, which was withdrawn from public passenger service in 2008 for safety reasons. Its successor is scheduled to go into operation in 2012/13.

One thing is certain: With a total length of twelve and one half kilometers for the four sections, the tram up to the Pico Espejo is the longest serially connected aerial tramway system in the world. However, there is no through travel, even if the top and bottom stations on the line are housed in the same buildings.

Oxygen available at all times

The tram journey begins at the Barinitas base station in Mérida's Plaza las Heroínas at an altitude of 1,577 m. The air starts to get noticeably thinner by the third station, La Aguada (almost 3,500 m). But help is always on hand: Oxygen is available in the stations and cabins for any passengers who might need it. The 60-passenger cabins also provide seats for 40 people. This is sufficient as it is the visitors from lowland areas who are most prone to altitude sickness. Travelers who live in the Andes are already acclimatized.

Stupendous panorama with 5,000 m mountain

The upper terminal, Pico Espejo (4,765 m), below the actual peak, offers a spectacular view of the mighty Andes and most impressive of all, the Pico Bolívar which at 5,000 m is Venezuela's highest mountain. The stations will be designed to provide visitors with an experience to be remembered: The first top station is to be built in the form of a large panorama restaurant, the second as a museum, the third will be another restaurant and the upper terminal will include a small café and a large viewing terrace.

Demanding installation

The installation work on the tram poses a whole series of challenges. These begin with delivery of the tramway parts. Road transport from the port city of Maracaibo roughly 450 kilometers away is performed by heavy trucks which travel at night to avoid the severe traffic congestion encountered during the day. All the building materials including sand and gravel have to be transported up the mountain from Mérida. The old tram system is being used for this purpose. The new tram will retain the old alignments (in part) but include new stations.

When the original tram was built in 1958, a four-section material ropeway was also erected alongside it. Once the old tram is demolished, the material ropeways will provide the only connection to the top of the mountain during the construction phase. These will continue to provide a means of transport for freight when the new tram sections open (from summer 2013 onward).

80-ATW Monte Bianco: All going perfectly in plan

On the Italian side of Monte Bianco (Mont Blanc), Doppelmayr is building an 80-passenger aerial tram with rotating cabins and two sections which will start in Courmayeur.

The Doppelmayr installation will replace a 60-year-old, three-section aerial tram. Its top section has already been dismantled. (Sections I and II continue to carry tourists.) Construction began in 2011. The lower section is expected to go into service by 2014 at the latest, with completion of the entire tramway planned for 2015.

Spectacular technology

The long construction period is due to the extreme geological conditions on site. The first step involves very extensive and time-consuming foundation and preparation work, particularly at the top terminal. Transporting the materials and equipment is also a difficult and laborious process. Work frequently has to be interrupted when bad weather sets in, especially in the case of strong winds which make it impossible to use the cranes.

The new tram is quite spectacular, not just because of the technical features of the cabins, stations and line structures, but also because of its length and height. The top terminal lies at an altitude of 3,500 m; the route covers 4.3 km in length and has a vertical rise of 2,140 m.

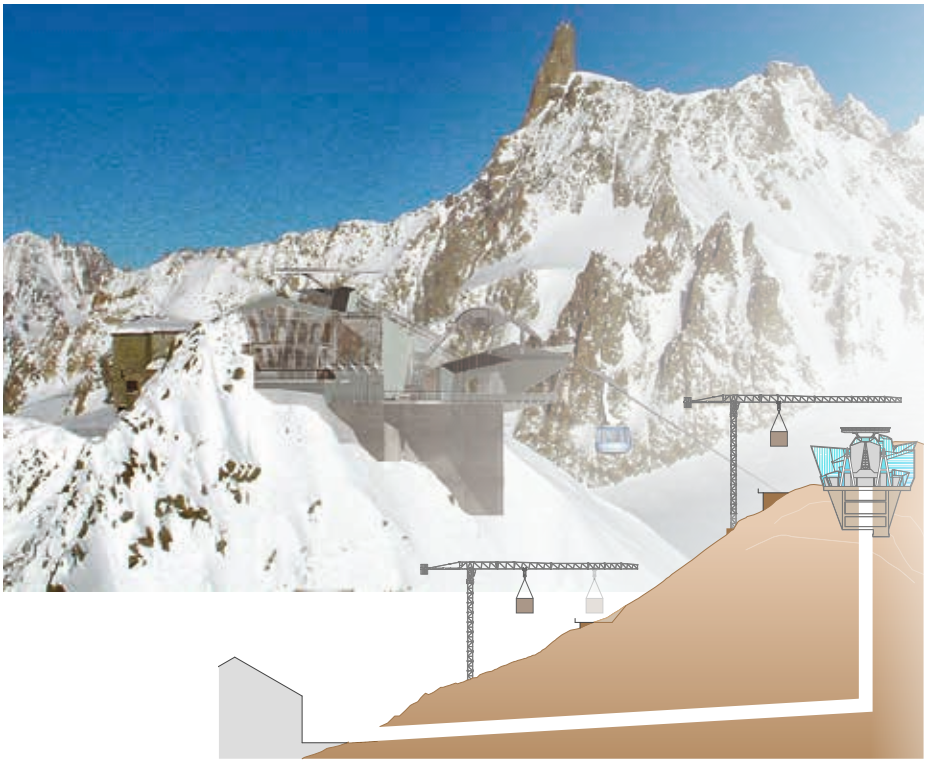
Work is being carried out on all three stations as well as on the line; progress with the construction and ropeway installation is going largely to plan.

Elevator shaft for freight and passenger transport

The connection between the upper terminal and the Rifugio Torino mountain hut below poses a particular challenge. For this purpose, a 70 m deep vertical shaft is being constructed. From its base, a 130 m access tunnel will be taken at a slight angle down to the front of the Rifugio Torino. The shaft is currently being used to transport material and equipment; ultimately, it will accommodate a lift for tourists. A small tram that used to run from the mountain hut up to the upper terminal of the main tram was dismantled in spring 2012.

Precaution against climate change

The perpendicular shaft also serves a second important function. As it is secured with reinforced concrete, it would continue to provide a solid hold for the station foundation in the event that global warming leads to instability of the permafrost at a later date.



A vertical shaft with a gently sloping access tunnel will connect the upper terminal with the Rifugio Torino.

Gondola for garden lovers has been a great success

The Floriade 2012, the world's biggest flower show, ran for six months. During that time, most visitors used the gondola lift to gain a bird's eye view of the exhibitions. The operators estimate that the lift has carried some 3 million passengers.

The management team responsible for the Floriade 2012 in the Dutch city of Venlo, is very pleased with visitor numbers.

As owner and operator, the Austrian company Silvretta Montafon is also satisfied with capacity utilization on the 1.1-km 8-passenger gondola lift. Roughly two in three visitors to the Floriade rode on the gondola. As the lift had already been in service from April to October 2011 and many Dutch citizens took the opportunity to take a look at how construction of the site was progressing, passenger numbers are estimated at around 3 million. (The final figure was not available at the time of going to press.) Having served the Floriade, the lift will be taken down and reinstalled in Vorarlberg's biggest ski area, Silvretta Montafon. It is scheduled to be back in operation at its new location by 2014 at the latest.

The Floriade in Venlo in the Netherlands: Admiring the garden displays from the gondola lift at a height of 35 m above the 66 ha expo grounds.

Training fosters responsibility

The operating company Mayrhofner Bergbahnen sends virtually all its technical staff on Doppelmayr courses. "So that they can take ownership and responsibility for their roles," emphasizes Managing Director Josef Reiter.

And what about the employees? Among the participants from Mayrhofner Bergbahnen, Stefan Eberharter's reaction is pretty typical: "Awesome, really useful, I'll come again." Stefan is deputy operations manager on the 8-MGD Horbergbahn. And it really is the case that even long-serving operations managers and machine operators often report back to their boss, Josef Reiter, after attending a course that there are a lot of things they now understand better and will therefore be doing things differently in future.

Getting to grips with technical advances

When asked why Mayrhofner Bergbahnen attaches so much importance to the further training of its technicians, Josef Reiter cites the growing demands made on his employees:

- First, technology never stands still. The sophistication of the lifts is increasing.
- Second, the legal framework that applies to the lifts and the crew is constantly changing.

"We therefore feel we have a duty to ensure our employees are properly equipped to meet those requirements." That does not mean they would or could do without the after-sales service Doppelmayr provides: "Our job is to ensure continuous operations and to carry out the required maintenance and inspections. We want to be effective in identifying any problems and fast at resolving them. But when it comes to specialist work on the line, the control system, etc., it obviously makes sense to call in people from Doppelmayr."

Stefan Eberharter, 23-year-old deputy operations manager on the Horbergbahn, has taken part in two Doppelmayr courses to date ("Advanced course in drives and hydraulics" and "Rope function and maintenance"). He is completely bowled over by the form and content of the courses. "I always learn something new or find confirmation for what I do," he says.

Josef Reiter, Managing Director of Mayrhofner Bergbahnen: "We have a detailed personnel development plan. This is to ensure that over a 3 to 5-year period every employee acquires more knowledge about the lift he is responsible for than the basic level stipulated by the authority."

Doppelmayr offers further training courses on specific topics such as hydraulics, mechanical equipment, electrical and control technology.

Experiencing the wide range of cabin designs at first hand

The new CWA product showroom enables customers to take a look around and see for themselves where the quality differences lie.

In a time where promotion and merchandising are almost exclusively visual, the sales team at CWA Constructions haven't forgotten just how important the other senses can be in the decision to purchase.

Touch, feel and listen

The new showroom layout provides the visitor with company insights and an opportunity to experience the cabin designs at first hand.

The overview of CWA's complete product portfolio extends over 500m² of floor space. As well as a brief presentation of the ropeway expert's successful past, the current range can be viewed inside and out to clarify questions such as:

- What is the simplest way of transporting different sports equipment?
- How do I change over from winter to summer operation?
- What standard designs or special fittings are available for urban or alpine applications?

And all these issues can be tested out on the spot with the latest generation of sports equipment. A guided tour in the company of the technical experts

brings the world of CWA to life, from cabins with automatic ventilation and air-conditioning to comfortable seating and flexible layouts.

Material samples

In the well-equipped area dedicated to material samples, visitors can examine and view every variation from seat upholstery to glazing.

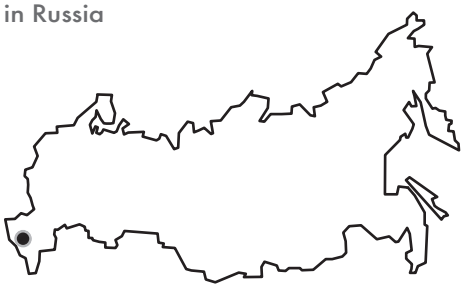
One of the showroom's highlights is certainly the infotainment system which is built into a cabin. The terminal to go with it, which is wirelessly connected with the cabin, offers ample opportunity to play around with the functions (LCD monitor, sound system, radio handsets, onboard two-way communication, CCTV, dimmable spotlights and planar lighting).

Needless to say, the latest achievement, i.e. the TARIS cabin, is also on show.

As well as visiting the showroom, customers also get a chance to take a look behind the scenes. They can see for themselves how a quality product "Made in Switzerland" is created, reinforcing their trust in the safety, functionality and optimal price/performance ratio of the CWA portfolio.

CWA® SHOWROOM

New Doppelmayr subsidiary in Russia

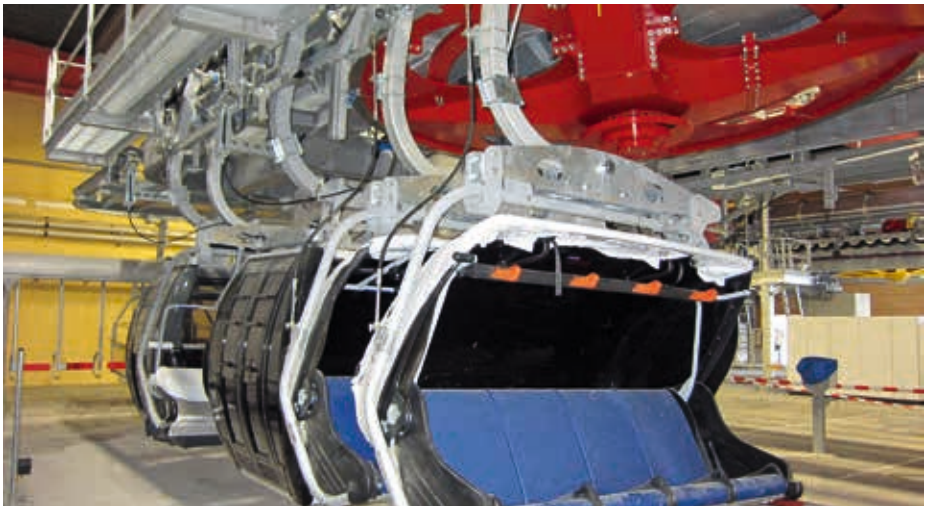


Doppelmayr's presence in the Russian market has been expanded with the opening in early April of the customer service centre, Doppelmayr Russia. With its own warehouse for emergency spare parts and wear parts in Adler (near Sochi), the subsidiary guarantees the fast and professional handling of inquiries from Russian customers. (Photo: After-Sales Manager Hermann Schwarzenbacher and office manager Jana Korsun.)

Doppelmayr sponsors ropeway technician training

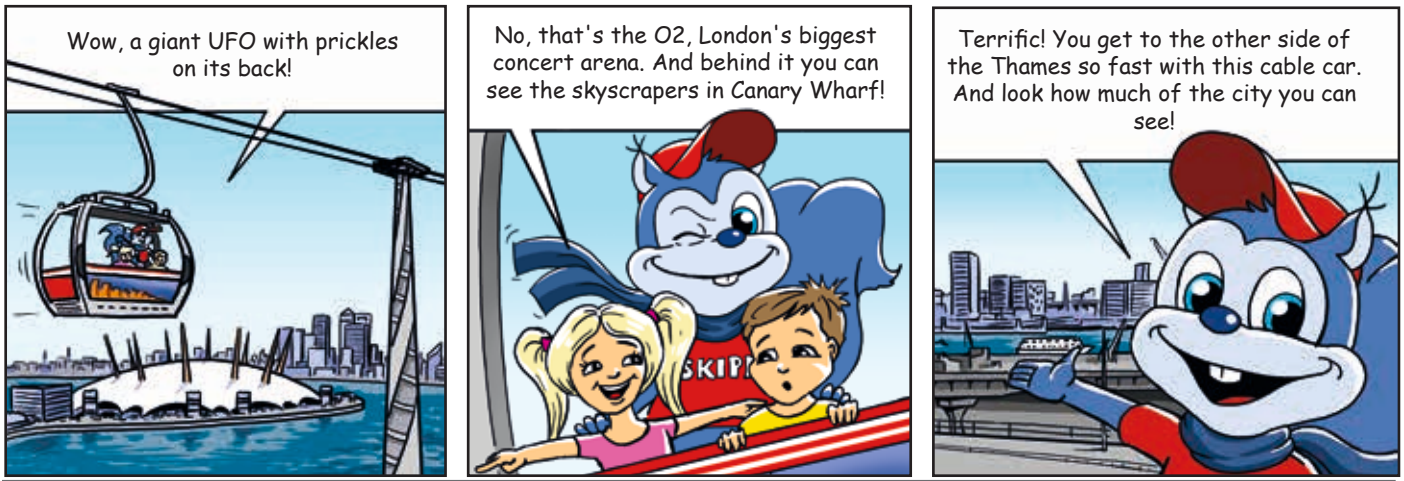
At the Provincial Vocational College in Hallein (Salzburg), an apprenticeship course for ropeway technicians has been offered since 2008. Doppelmayr has provided support from the outset in the form of test benches, hydraulic units, grips, spring boxes, tools and technical know-how. In 2011/12, Doppelmayr installed two training lifts in a machine shop belonging to the college:

- A combined lift with fixed-grip return station. (Overhead drive with diesel emergency drive; maintenance carrier; dead-end parking rail with service platform. The special feature of this lift is that the detachable grip travels around the fixed-grip return station to enable training on the features of a fixed-grip installation.)
- A classic surface lift, as used hundreds of times over in ski resorts, with a selection of the commonest spring boxes.



Skippy in London

Hi kids! Here I am again!
Right now I'm in London where they built a cable car that opened in time for the Summer Olympic Games. You can use it to cross the River Thames in just a few minutes – so no traffic jams and no looking for somewhere to park!



Proprietor, editor and publisher: Doppelmayr Seilbahnen GmbH, A 6961 Wolfurt • Editing, graphics and layout: WIR Public Relations Wolfgang M. Wagenleitner, Weißacherg. 19, A 6850 Dornbirn • wir@doppelmayr.com • CWA editing and layout: Tobias Haarmann