

With prize draw
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The SunnAlm lift is one of three 6-seater chairlifts built in 2009 that are designed to carry children and adults and feature footrests. p.5



Spectacular 6-seater chairlift in the Tyrol

Rapid completion of an alternative to the Wenner Mountain project. p.2

World first: Restraining bar locking plus footrests

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Low-wear, cost-effective maintenance even with low capacity utilization. p.11

New ropeways in Valfréjus, France

Old 6-passenger gondola lift replaced by an 8-MGD and a 6-CLD. p.14

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The Matterhorn-Express has been extended to include a third section. p.12

 **Doppelmayr®**

Magazine for
Customers and Employees

Flagship project on Hochzeiger Mountain



Hochzeiger-Bergbahnen is a flexible company. Within a short time frame they had a spectacular new project in place in a core ski region: the detachable 6-seater "Zirben" chairlift with orange bubbles and seat heating.

While the Zirben chairlift was being installed the lift company also built two ski trails, tripled its snowmaking capability¹ and proudly marketed itself as a "family ski resort offering top-class sports facilities". Hochzeiger Bergbahnen has something for everybody, from wild kids to accomplished skiers. That means even families with the coolest teenagers can vacation together.



MD Hans-jörg Wohlfarter: The new Zirben chairlift with heated seats and orange bubbles provides access to a northern slope with abundant snow until well into the spring. It has become a centerpiece of the ski area.

ADAC award

This comprehensive offering also receives wide recognition. As a consequence, the

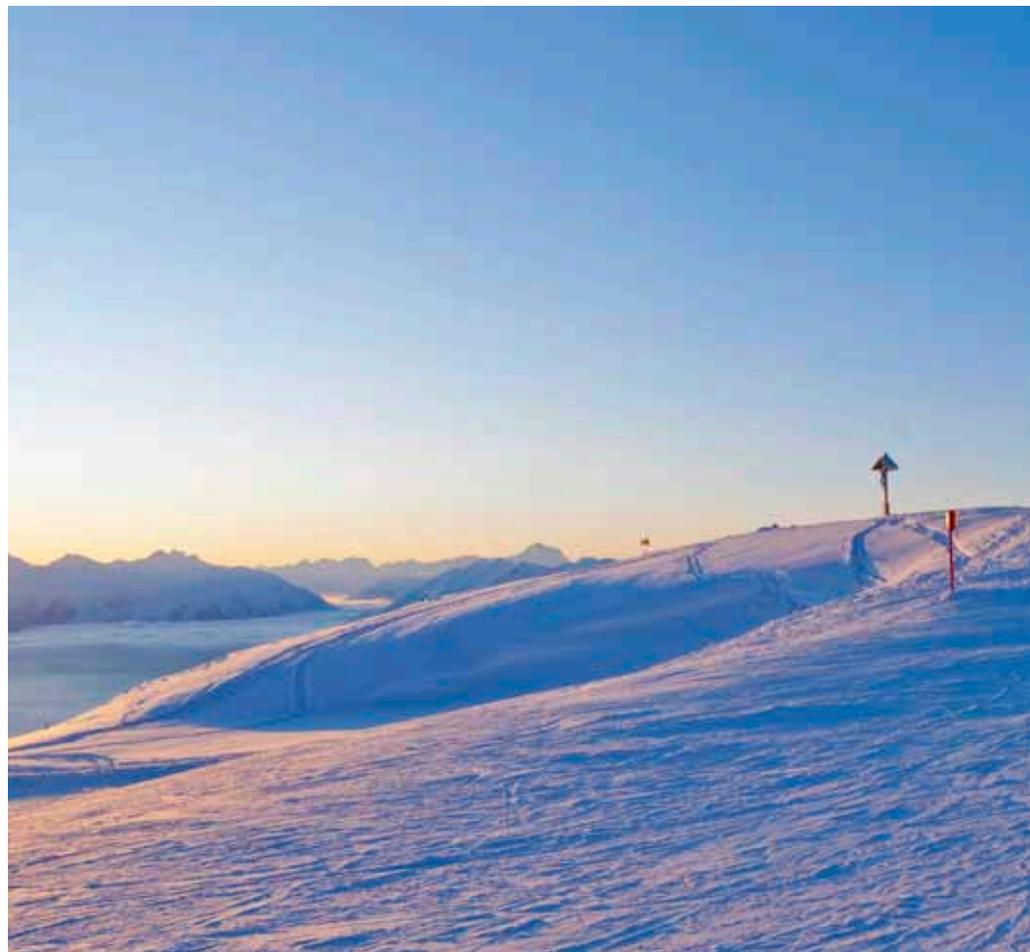
Imagination and determination

Hochzeiger Bergbahnen had been trying to expand the ski resort in the Wenner Mountain area since the early 1990s.

¹ 9 lifts, 52 kilometers of trails, 64 snow cannons, expansion of the storage pond from 40,000 m³ to over 105,000 m³

² German Automobile Association. Also a major service provider in the European travel business.

³ 15 percent come from Switzerland, almost 10 percent from Austria. The remaining guests are from Netherlands, Belgium and the Czech Republic.



The project had advanced considerably when approval was unexpectedly denied in 2008. But the lift operating company headed by MD Hansjörg Wohlfarter were not about to give up that easily. They had the trail and capacity expansion on the 2,480m Sechszeiger Mountain up their sleeve as an alternative and took swift action. This project was rapidly approved and implemented. The finance was raised "from our own resources because we know how to run a business" says Hansjörg Wohlfarter with obvious satisfaction.

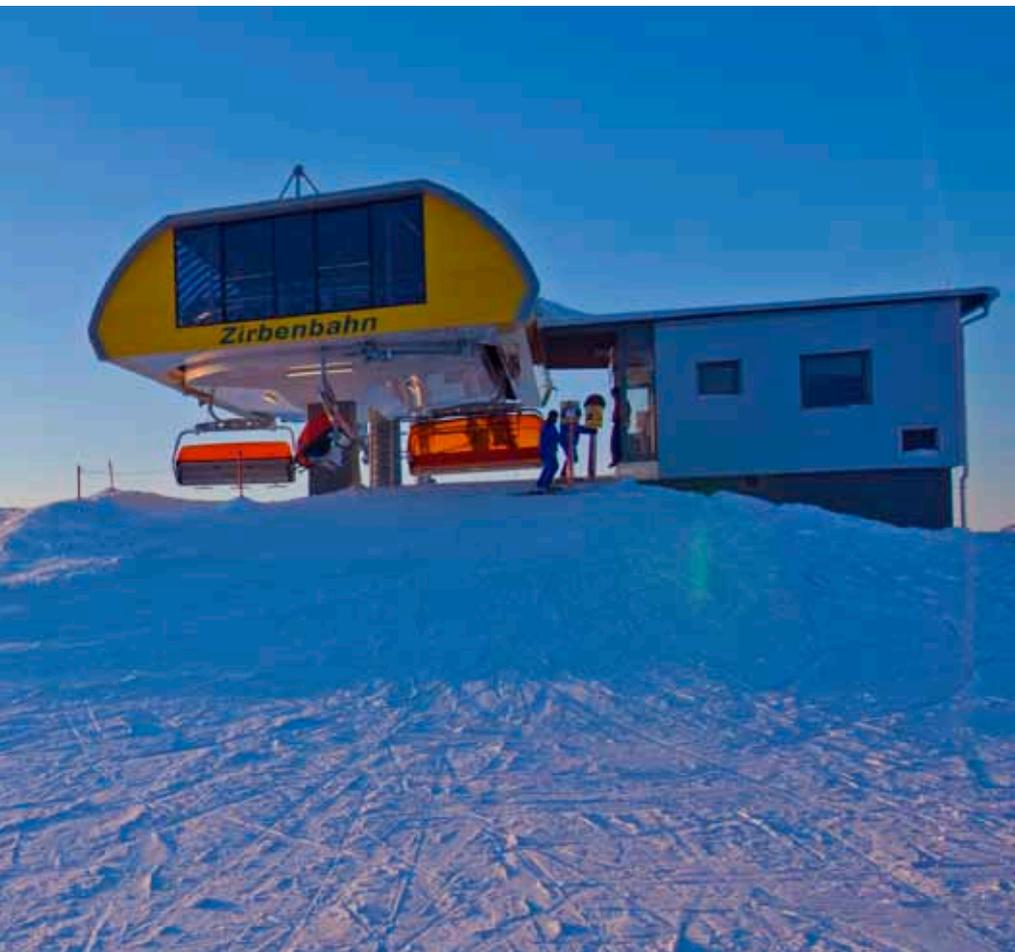
The area is also a popular destination for hikers in the warmer months of the year. There are two lifts that operate from mid-

June to mid-October and 100 km of hiking trails to choose from.

6-CLD-B-S-O Zirbenbahn

Transport capacity	2,400 PPH
Trip time	3.4 min
Speed	5.0 m/s
Chairs	51
Interval	9.0 s
Inclined length	1,026 m
Vertical rise	432 m
Towers	9
Drive	Top
Tension	Bottom

Expansion that takes the long view: Since December 2009 the new Zirben chairlift has been carrying guests to the top of Sechszeiger Mountain at 2,480 m - one of the most magnificent viewing points in the ski region. This installation has helped to achieve a sustainable improvement in the tourist infrastructure of the entire valley.



Good results

Doppelmayr/Garaventa was able to consolidate its pole position in the international ropeway market in fiscal 2008/2009 and posted satisfactory results. This was achieved despite the effects of the global financial and economic crisis on the ropeway sector. In Eastern Europe, Russia and North America it was not possible to maintain the previously high sales revenues. In contrast, the markets in Western and Central Europe nonetheless stabilized at a good level. A total of 138 ropeway projects were realized by Doppelmayr/Garaventa worldwide.

While ropeways for winter sports remain the Group's most important business field, urban ropeways have also become an established market segment. Installations were built as modern urban transport solutions for various cities in North Africa and South America. The global financial and economic situation continues to negatively impact on all sectors within the capital goods industry. Although Doppelmayr/Garaventa is well positioned in terms of both product portfolio and strategic alignment, it cannot entirely escape this development. Nonetheless, the Doppelmayr/Garaventa Group is well equipped with its team of flexible, experienced and motivated employees. We can therefore trust in our strengths and look toward the future with confidence.

Michael Doppelmayr

Chairs with footrests and restraining bar locking

This winter, three ski resorts opted for 6-seater bubbles with automatic restraining bar locking and footrests: Riffelsee in Pitztal, Steibis in Allgäu and Schmittenhöhe/Zell am See.

The new restraining bar locking system with footrests is a world first. It addresses the comfort requirements of all age groups and once again highlights Doppelmayr's leading role in the field of ropeway technology.

European ropeway codes stipulate that children who are less than 1.25 m tall can only be transported on a chair without special safety equipment in the presence of one adult per child. This can pose considerable organizational problems for large families and ski schools.

The design of the chair with restraining bar locking and footrests is based on the Gampen 8-CLD-B family lift in Serfaus (Tyrol) which went into service in winter 2008/09.

Up to now, however, footrests were not included. This meant that during the trip children would not be tempted to slip too far forward to reach the footrest (like the grown-ups) and, at the same time, adults would not be overly restricted in their freedom of movement. Particularly on longer lifts, however, adults have tended to find it uncomfortable to ride without a support for their skis.

5 children, 1 adult plus a comfortable footrest

With the new design solution, this minor shortcoming has been eliminated and safety further enhanced at the same time. As soon as the chair passes the closing



New restraining bar system on the 6-CLD-B-S SunnAlm lift: The foot/ski rest is attached to the restraining bar by means of a formed tube which is centered on the seat. When the restraining bar is closed, the footrest connecting tube is positioned between the

passenger's legs. This makes it impossible to slip out of the seat. To ensure that the passengers are sitting correctly during the closing operation, the seats are in different colors. In addition, spacer wedges and seat marking are provided (on the Sunn-



rail before leaving the station, the restraining bar is automatically closed. - Roughly six seconds after passengers have taken their seats, the bar is firmly locked. Passengers cannot open the restraining bar by themselves on the line. The locking mechanism is only released on entry into the top station and the restraining bar is automatically raised by the time passengers reach the unloading point¹. This system means that five children with a minimum height of 90 cm can be carried on a chair with just one accompanying adult. A major asset of this world first is that it dispenses with the need (official requirement in Austria) for the costly and maintenance-intensive LED display systems on entry into the top station². The



Alm lift this is an ibex - the logo of the lift operating company). This marking must be visible between passengers' legs once they are seated so that there is enough room for the restraining bar closing mechanism.

new restraining bar locking system has also met with wide approval from the authorities.

SunnAlm lift in Pitztal chooses new chair type

The operating company, Pitztaler Gletscherbahnen, bought this highly innovative system for the SunnAlm lift which replaces an old T-bar known as the Muldenlift. The SunnAlm lift is reached from the village of Mandarfen (1,682 m) with the Riffelsee lift, a Doppelmayr 6-passenger gondola built in 1994. From the top station of the Riffelsee lift, two trails lead to the bottom station of the new SunnAlm lift (2,130 m). Riding up to the top station (2,350 m) gives passengers the option of skiing down to the gondola top station, which in turn is located at a meeting point for various ski trails. From here, you can get to the Riffelsee circuit (2,232 m) which is a great favorite for hikers in the summer and cross-country skiers in the winter. One of its many attractions is the magnificent view of the 3,000 m peaks of the Ötztal Alps and the tremendous icefalls of the Taschachferner.

¹ In the event of a rescue operation, the restraining bar can be opened with the aid of a helper by activating a lever on the hanger arm.

² These displays signal when passengers can open the restraining bar.

6-CLD-B-S SunnAlm-Bahn

Transport capacity	2,000 PPH
Trip time	2.0 min
Speed	5.0 m/s
Chairs	23
Seat height	45 cm
Interval	10.8 s
Inclined length	469 m
Vertical rise	216 m
Towers	6
Drive	Top
Tension	Bottom

An ear for the customer

He is seen as someone who is innovative and gets things done: Dr. Hans Rubatscher, chartered accountant and tax adviser in Innsbruck, businessman - and with heart and soul a managing partner of Pitztaler Gletscherbahnen.



Dr. Hans Rubatscher, Pitztaler Gletscherbahnen: "I've found a like-minded partner in Doppelmayr."

He was also one of the first to recognize the value of the brand-new restraining bar/footrest system. Despite his enthusiasm for Doppelmayr's existing automatic restraining bar system, he wasn't entirely happy with the fact that passengers had to let their feet dangle. "That way, you can't really relax during the trip," he felt. So the further development of the system perfectly suited his needs. "Doppelmayr were willing to listen," he points out and believes that Doppelmayr always take customer wishes seriously.

Rubatscher's innovation projects are certainly not limited to ropeways. At Lake Riffelsee, for example, he built a restaurant based on ecological "PassivHaus" principles (which included seven 120 m-deep bore holes to utilize geothermal energy and a solar energy system). He was also the first to buy a completely new, energy-efficient snowmaking system and is currently in the process of constructing a particularly innovative mountain restaurant on the Hinterer Brunnenkogel. It is not the novelty factor which drives Rubatscher to try out new things but a well-considered and calculated market strategy. Ultimately, innovations have to pay off.

A bundle of modernizations and new features in Oberallgäu



Steibis ranks as one of Germany's prettiest ski resorts with reliable snowfall. In summer 2009, three surface lifts dating back to 1982 and 1971 were replaced by the "Fluhexpress", a detachable 6-seater chairlift with the new restraining bar locking plus footrests and seat heating.

The new installation has not only increased ride comfort for passengers but also freed up more surface area for the ski trails. Prior to the Fluhexpress, the ski trails were accessed by two double surface lifts that ran parallel to each other. The (parallel) Fluh lifts plus the older of the two Bärenloch lifts were completely removed. The new Fluhexpress skirts the edge of the ski trail. This means that the area previously occupied by the towing tracks, towers and terminals of the surface lifts can now be freely enjoyed by skiers.

Mobile surface lift becomes stationary

For winter 2008/09, Steibis had purchased a mobile surface lift – a world first at the time. One of the reasons for this decision was the fact that the landowners were not willing to grant long-term permission for the lift location. Now that it has become clear that the surface lift



Thomas Lingg, Managing Director of Imbergbahn & Ski-Arena Steibis GmbH & Co. KG: "A contract with Doppelmayr is like an insurance policy incorporating an all-inclusive no-worries package."

does not greatly impair the grazing land in spite of the very high volumes of skiers, the landowners' concerns have been allayed. With no more objections against the lift, it was decided to give the lift permanent foundations and the towing track alignment was slightly modified.

Another highlight: the new rope visualization system

Steibis is one of the first ski resorts to install the electronic rope visualization system developed by the IFT Institute at the University of Stuttgart.



Imberg-Bahnen see themselves as a skiing paradise for families and pleasure-seekers. The new Fluhexpress with its heated seats, bubbles and restraining bar locking system plus footrests entirely satisfies these aspirations.

Top comfort on Schmitten



A prerequisite for using this system, however, was the development of a suitable console for the cameras, a concern that Imbergbahn MD Thomas Lingg addressed to Doppelmayr. And Doppelmayr responded without delay.

The new console can easily be fitted in all UNI-G stations. This also means that the same visualization device can be used for several ropeways.

Schmittenhöhe near Zell am See (Salzburger Land) is boosting its attractiveness for skiers. The new 6-seater Ketting chairlift features bubbles, heated seats and the new restraining bar locking system with footrests.



Director Dr. Erich Egger, Schmittenhöhebahn AG: "The new 6-passenger chair-lift boosts the attractiveness of the western side of the Schmitten and facilitates access to the summit. We have 26 ropeways and 77 km of ski trails."

6-CLD-B-S Fluhexpress

Transport capacity	3,180 PPH
Trip time	4.7 min
Speed	5.0 m/s
Chairs	60
Interval	9.0 s
Inclined length	1,230 m
Vertical rise	330 m
Towers	12
Drive	Top
Tension	Bottom

It replaces the Ketting T-bar lift (1982) as well as an outmoded triple chairlift (1979) known as the "summit lift". The stations were demolished and the old lift lines were either integrated into the ski trails or reforested.

The new bottom station is located in the same position as the terminal of the old surface lift and has 90° loading. An entirely new location was chosen for the top station.

6-CLD-B-S Kettingbahn

Transport capacity	3,200 PPH
Trip time	3.7 min
Speed	5.0 m/s
Chairs	64
Interval	6.8 s
Inclined length	962 m
Vertical rise	312 m
Towers	8
Drive	Top
Tension	Bottom



A major reason for acquiring the new lift was the desire for enhanced comfort as gusts of icy wind are a frequent occurrence on the western side of the Schmitten summit. In keeping with tradition, the stations are designed to blend in harmoniously with the landscape. The bottom station is clad in Rauris natural stone.



By Funifor to freeride paradise

The third Doppelmayr Funifor has been installed in the Monte Rosa region.

It carries passengers from the groomed snow trails of Passo dei Salati directly to the “freeride paradise” and is the starting point for many tours to the surrounding 4,500m-high mountains.

The very latest Funifor is the final link in a three-section Funifor chain and runs from Passo dei Salati (2,960m) to the Indren at 3,275 m, below the mighty 4,255 m Punta Vincent. From Passo dei Salati all the options are for freeriders – and there are many to choose from.

The Funifor replaces the 44-year-old aerial tramway Bocchette delle Pisse – Indren (built in 1965)¹. The original plan had been to take the new lift directly from the top station of the Funifor Pianalunga – Passo dei Salati (built in 2004) up to the Cresta Rosa at approximately 3,700m. Next to the old Indren top terminal a tower with loading and unloading was envisaged. By 2005, a material ropeway was already in place and excavation work had started at the top terminal. However, the permission to build, which everybody thought was merely a formality, had yet to be granted by the Region of Piedmont. Contrary to expectations, the application was rejected.

Difficult terrain

But the customer, Monterosa S.p.A. from Aosta, didn't give up. Instead, the ropeline would be entirely on territory belonging to the Region of Aosta. The top station was positioned to the side of the glacier, as the crow flies roughly 400 m



Hannes Pircher, project manager at Doppelmayr Italia; Monica Deval, project manager on the customer's side and future technical manager of the new Funifor; Ing. Franco Torretta, Technical Director at Ufficio Tecnico Monterosa S.p.A.; and Nevio Ronco, Funifor Operations Manager. Doppelmayr was contracted for the electromechanical equipment as well as the civil engineering works on the bottom station and the towers. The visual design of the stations resembles the compact, detachable 4-CLD installations from Doppelmayr Italia.



to the west of the old Indren top terminal.

The construction of this installation, as it now stands, was then begun in 2006. The work was not as straightforward as anticipated. At these altitudes, it is not possible to perform actual building work for more than three or four months of the year.

And to cap it all, a 9 m layer of permafrost was discovered at the tower location next to the top station. This meant re-



inforcing the foundations with micropiles and adopting further structural measures, redimensioning the tower and increasing its height by another 10m, which took it up to 30m. Transporting the 30t track rope up slopes with 45° gradients in places to the bottom station at an altitude of 2,960m was an arduous task, as was the rope installation. This involved working on the edge of a 50m precipice with very little room to maneuver.

Innovative station anchoring

The drive tension stations including track

rope bollards are each fixed to a concrete mast.

The floor heating in the stations is powered by solar cells and, when this is not sufficient, by two emergency generators in the bottom station and three in the top station.

A water basin that is integrated into the top station collects rain and melted snow for use as service water. This provides ample supplies of water, which would make it possible to supply a hotel or restaurant at a later date - the space is already available. Drinking water is delivered by ropeway.

60-FUF Passo dei Salati - Punta Indren

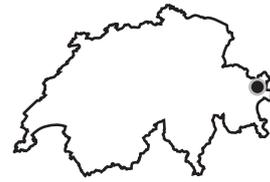
Transport capacity	740 PPH
Trip time	4.9 min
Speed	10.0 m/s
Inclined length	1,570 m
Vertical rise	315 m
Towers	1
Drive	Bottom
Tension	Bottom

¹ Closed down at the end of the winter season 2006/07, but yet to be dismantled. It is envisaged that the upper terminal will be retained for use as a mountain museum.



Two factors were decisive for the decision to build a Funifor: First, it is possible to run just one of the two parallel lines in times of low passenger volumes. This makes you very flexible with personnel and service planning. Second, the Funifor system is extremely wind-resistant.

Switzerland: New feeder to Motta Naluns



The operating company, **Bergbahnen Motta Naluns Scuol-Ftan-Sent AG**, replaced the ropeway installation from Scuol to Motta Naluns in summer 2009.

An 8-seater gondola lift now replaces two 4-seater lifts. The two-level bottom station has been completely rebuilt. The ground floor houses the equipment hire and service center, the winter sports school and the cash desks.

Freight decks for deliveries to the mountain restaurants

Passengers access the turnstiles in the platform area via an escalator. The gondola parking facility with six automatic dead-end parking rails and a service platform is also located near the platforms along with the loading zone for the freight decks which carry supplies to the mountain restaurants. Both the bottom and top stations have a separate loading loop for the freight decks. The machine room is located beneath the exit platform in the top station.

Director Egon Scheiwiller explains that the decision to build a new lift was taken because "we are seeing a growing demand for comfort on the part of our guests". And what's more, there's no more waiting in line now that transport capacity has been virtually doubled, so "guest satisfaction has risen." He also



Egon Scheiwiller, Director of Panoramic Motta Naluns Scuol-Ftan-Sent SA: "We had a highly vigorous construction program. The building work was performed in two-shift operation in some cases. The towers were pre-assembled at the bottom station and flown in by helicopter. The top and bottom stations were erected using a mobile crane. Collaboration with Garaventa worked out very well."

notes that "a new lift is a good selling point".

The Scuol ski region has 80 kilometers of ski trails, roughly 30 percent of which has snowmaking facilities. The majority of guests stay for the week. Seventy percent of them are Swiss, mostly from the greater Zurich area and eastern Switzerland, and 25 percent travel from Germany. The remaining guests are largely drawn from the UK, the Benelux countries and Italy. Popular attractions include the nearby national park in the summer and the "Engadin Bad Scuol" spa facilities all year round.

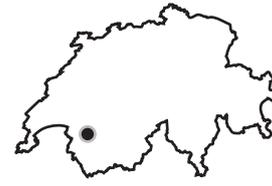
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8-MGD Scuol - Motta Naluns

Transport capacity	2,800 PPH
Trip time	7.4 min
Speed	6.0 m/s
Cabins	86
Interval	10.3 s
Inclined length	2,303 m
Vertical rise	856 m
Towers	16
Drive	Top
Tension, adjustable	Bottom

The new 8-MGD operates both as a feeder and to serve the adjacent slopes.



Fixed-grip quad in Switzerland's French-speaking region

The family ski resort of Ovronnaz in western Switzerland boasts a new fixed-grip quad chairlift. A UNI-G overhead version was chosen as drive unit.

The new quad chairlift replaces the Bougnonne platter lift. As the drive station is located at the bottom and the return station is at the top, a "controlled" tension system was decided on rather than the usual "regulated" system. That means: a smaller load and therefore less wear and lower maintenance costs if the lift is not run at full capacity.

Protection of the black grouse population

The communications and power supply cables were laid in the ground, which is not customary practice in Switzerland. The reason for this was to protect wild birds. Black grouse are local residents that find it difficult to avoid the thin aerial cables.

Ovronnaz is located 10km from the Martigny-Sierre highway on a sunny, south-facing plateau at the foot of the 3,000m Muverans chain of mountains. The ski region lies at altitudes ranging from 1,400m to 2,500m. It is served by two detachable chairlifts, a fixed-grip chairlift and five surface lifts. Its ten ski trails have a total length of 33 km, ten percent of which has snowmaking facilities.

Skiing & thermal baths

The region has three well-known thermal baths. The combination of skiing & bathing is very popular. Seventy percent of visitors come from the French-speaking part of Switzerland, while the German-speaking part and Belgium account for roughly ten percent each.

Gianluca Lepori, Operations Manager/Managing Director of TéléOvronnaz SA: "The weather was very kind to us during the construction. Garaventa took charge of installing the electromechanical equipment and did an outstanding job. The new lift is very user-friendly, with solid construction and excellent quality down to the smallest detail."

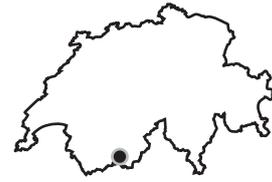


4-CLF Bougnonne	
Transport capacity	1,525 PPH
Trip time	5.0 min
Speed	2.5 m/s
Chairs	63
Interval	9.5 s
Inclined length	730 m
Vertical rise	254 m
Towers	7
Drive	Bottom
Tension	Top



With the fixed UNI-G for fixed-grip lifts, Doppelmayr/Garaventa offers an interesting alternative to the (more compact) Chairdrive, particularly as a spacious machine room is one of the striking features of the fixed UNI-G for fixed-grip lifts. This makes it particularly operation and maintenance-friendly.

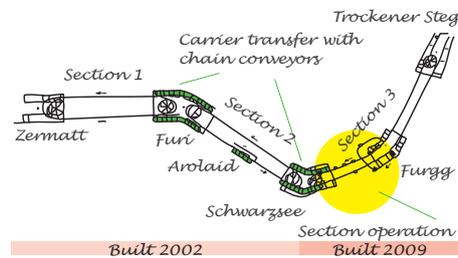
Continuation of the Matterhorn-Express



The 8-passenger gondola lift, Matterhorn-Express, has been extended from Schwarzsee paradise via Furgg to Trockener Steg. This now makes it possible to reach the Trockener Steg region in around 25 minutes from Zermatt – without having to change along the way.

Construction of the new gondola lift was necessary because it would no longer have been possible to extend the operating license for the aerial tramway from Furgg to Trockener Steg without major investments. The new lift installation takes a new route.

Section operation with continuous haul rope in the intermediate station



An angle station was added to the existing Schwarzsee paradise station. The new (third) section has an angled intermediate station at Furgg. Passengers can load and unload in both directions. This station is designed to allow the section from Furgg to Schwarzsee to be run independently. Expansion of the Furgg-Trockener Steg section for independent operation at a later date is also possible.

The access platform in Furgg is higher than the ski trail from Schwarzsee. From this trail, skiers can access the platform for travel in the direction of Trockener Steg via an escalator.

The Garten ski trail, which comes from the glacier or Trockener Steg, leads straight to the access platform. Time constraints in 2009 meant it was no longer possible to build an underpass from the Käsestube restaurant, 100m away, to the access area. As a provisional arrangement, a cord lift has been erected.

The demolition work on the upper terminal of the aerial tramway Furgg – Trockener Steg began in May 2009. The Furgg building is to be retained; it will be integrated into the 6-seater chairlift Garten planned for 2014/15. The pulsed

movement gondola lift Furgg – Schwarzsee is scheduled for removal in spring 2010.

In Zermatt, motor vehicles are generally prohibited. For this reason, all the material was first brought to the Visp rail station by truck, where it was reloaded onto carriages and then again forwarded by truck (with special authorization) from the Findelbach/Riffelboden station.

Landslide destroys road and makes material delivery difficult

Further transport was hampered in May, when a landslide made the road impassible in the Stafelalp area. A material ropeway from Schweigmatten to Furgg was then erected at lightning speed. From there, the equipment was forwarded by truck to Schwarzsee. The deliveries for Trockener Steg were transported using the aerial tramway Furi-Trockener Steg.

Even greater difficulty was encountered transporting the 60t rope. It was first brought to the location of the landslide on two reels and two trucks. From there it was wound onto one reel and then rewound across the landslide onto a special low-loader which had previously crossed the provisionally repaired road with great caution. The front and rear of this vehicle were finally uncoupled in the bottom station in Schwarzsee and jacked

up. This meant that no crane was required to unload the reel.



Christen Baumann, CEO of Zermatt Bergbahnen AG:

“The gondola lift Zermatt-Trockener Steg is the third longest in the world and, of these, the fastest. As all three sections of the installation are run in through operation, there is a mix of 160 standard cabins from the old fleet and the 107 new LWI cabins.”

8-MGD Matterhorn-Express 3	
Transport capacity	2,800 PPH
Trip time	9.0 min
Speed	6.0 m/s
Cabins	107
Interval	10.3 s
Inclined length	2,550 m
Vertical rise	341m
Towers	22
Drive	Top
Tension	Bottom





New 8-MGD in the Savoy Alps

Doppelmayr replaced both sections of the 26-year-old 6-seater gondola lift from Valfréjus to Punta Bagna (2,737 m) with a modern 8-MGD and a high-capacity 6-CLD. These two lifts are located one behind the other to form a chain.

The winter sports resort of Valfréjus is a four-hour drive from Paris and lies directly on the Franco-Italian border at an altitude of some 1,500m in the Savoy Alps. Valfréjus belongs to the municipality of Modane, which is also home to Doppelmayr France.

Better utilization of snow conditions

The old 6-seater gondola lift up to Punta Bagna had been built in 1983 and was very susceptible to side wind, which made it necessary to close the upper section for up to 40 days in some winter seasons. The new division of the line into a gondola and a chairlift section now gives the operators far more flexibility

to cope with wind and snow conditions.

Skiers take the gondola lift to get from the bottom to the mid station (2,200m). This is a great advantage for the many ski courses for small children which use the slopes on the Plateau d'Arrondaz.

"Magnestik" system for children

The upper section of the line is served by the chairlift. In order to be able to transport children safely, the chairs are fitted with the "Magnestik" system. Children don safety vests incorporating a magnet which attaches to a magnet in the backrest of the chair.

The ropeline and stations of the latest lifts are entirely new. The former mid



station has been converted into a depot for snow-grooming vehicles and equipment, some ski trails have been extended and the 20,000-volt power cable has been laid in the ground at the top of the mountain in order to "remove the visual impairment of the environment" (Michael Pasquet, Director of the operating company SEDS).

Checked history

Valfréjus has had a very checkered history. When the Transmontagne Group, which had operated the lift for 15 years, was liquidated in 2007, the ropeways were taken over by the private company SEDS. However, in view of the fact that

in France a ski region is considered to be an enterprise which is in the public interest, SEDS, the municipality of Modane and the Département Savoyen formed a working group which decides on investments and acts as "organizing authority". SEDS is entrusted with the task of management.

"Very satisfied with Doppelmayr"

Director Michael Pasquet explains that Doppelmayr was selected not only because that way they could be sure Valfréjus would benefit in terms of quality and modernity, but also because this company stands for availability, integrity, know-how and competence.

Added to this is the fact that the people from Doppelmayr show a sensitive approach to the very delicate ecology of this region. The Doppelmayr team were always there when you needed them and worked with care and forethought. They also made sure that the mayor was involved. "And the Doppelmayr engineers never hesitated when it came to listening to what I had to say and coming up with possible solutions. I'm really very satisfied." (M. Pasquet)

Doppelmayr is well-known throughout the region as a reliable partner

Doppelmayr's merits are recognized throughout the region. Four out of the seven lifts built in the Département Savoyen in 2009 came from Doppelmayr, the largest of these stands in Valfréjus.

The new lifts (photo shows the gondola lift) now ensure a satisfactory level of availability and contemporary standards of comfort for passengers. - And they make Valfréjus once again competitive with other ski resorts in the region.



Michael Pasquet, Director of the operating company SEDS: "The goal of the new lift is to be able to maintain operations even when there is strong wind."



Mayor Jean Claude Raffin is proud of the modernity of the new lifts and confident that it will provide the region with a fresh economic impetus.



8-MGD Valfréjus – Punta Bagna

Transport capacity	2,550 PPH
Trip time	7.0 min
Speed	6.0 m/s
Cabins	74
Interval	11.3 s
Inclined length	2,150 m
Vertical rise	667 m
Towers	14
Drive	Top
Tension	Bottom

6-CLD Valfréjus – Punta Bagna

Transport capacity	2,400 PPH
Trip time	5.1 min
Speed	5.0 m/s
Chairs	67
Interval	9.0 s
Inclined length	1,420 m
Vertical rise	511 m
Towers	13
Drive	Top
Tension	Bottom

Comfort lifts in Slovakia

Two chairlifts and a gondola lift went into service in Slovakia this winter.



Common to all these installations is the fact that their operators attach great importance to comfort and modernity. At the same time, each lift has its own customized features.

Completely new ski resort near Banská Štiavnica

Near the city of Banská Štiavnica on the eastern edge of Kremnické vrchy (Kremnica Mountains), a completely new ski resort is being created step by step. Managing Director Peter Klauz is firmly convinced: "We believe that the potential of this region for tourism is huge. What we need is a modern skiing center with top-class infrastructure, well-trained personnel and market-oriented prices."

Entertainment concept for gold-mining town

To ensure good capacity utilization all year round, an entertainment concept has been developed that is linked to the centuries-



Peter Klauz, Managing Director of Salamandra Resort, a.s.: "I

reckon every lift operator and ski resort developer in the country knows Doppelmayr and has already been closely involved with them. When it came to selecting a lift supplier for Banská Štiavnica the positive references from our Slovakian colleagues were a big help. We've never regretted our decision. - Doppelmayr gave us extensive advice on setting up the Banská Štiavnica ski resort. And we certainly appreciate the quality of their advice and their products as well as the impeccable service and flexibility they offer."



old tradition of gold mining in Banská Štiavnica and utilizes the existing mine-working infrastructure to create the gold miner experience. This incorporates the impressive old power house, long tunnels and gigantic caverns. The gold mine itself contin-



Andrej Klačan, Managing Director of SKI LIFT s.r.o., Banská

Bystrica: "We contracted Doppelmayr to erect a surface lift back in 2008. In view of our positive experience, we were confident that we had again made the right decision with the new quad chairlift Králiky. We were positively surprised with the way Doppelmayr handled the logistics and the effort they put into solving even the tiniest problem. Thanks to ideal weather conditions and the professionalism of the Doppelmayr team, it took just two months from delivery of the first parts for the ropeway to final testing."



The 8-MGD Chopok Západ is the world's first gondola lift with orange-tinted windows. The cabins have protective window film and additional hinged windows at the front.

ues to operate and is right next door to the ski resort.

Unexpected difficulties arose during the course of the new chairlift project. As no forestry permit was granted for the original location of the carrier parking facility on the edge of the forest, the plans for manual dead-end parking at ground level had to be changed at short notice in favor of an underground solution. This semi-automatic facility is now situated

underneath the ski trail and the waiting area.

Complete rebuild for the ski resort of Králiky

The family ski resort of Králiky, just a short drive to the west of Banská Bystrica (population 80,000) lies at an altitude of between 830 m and 930 m, has approximately 1.5 kilometers of ski trails and is

used primarily by visitors who come for the day. Over the past few years the resort has been completely rebuilt.

Managing Director Andrej Klačan explains how it all came about: "The initial idea of developing the region goes back many years. At the time, we had just drawn up a zoning plan and soon realized that the technical installations were outmoded and inadequate.

Five years ago we started prepara-

4-CLD-B Banská Štiavnica		4-CLD Králiky		8-MGD Chopok Západ	
Transport capacity	2,400 PPH	Transport capacity	2,250 PPH	Transport capacity	2,400 PPH
Trip time	4.5 min	Trip time	2.6 min	Trip time	6.3 min
Speed	5.0 m/s	Speed	5.0 m/s	Speed	6.0 m/s
Chairs	91	Chairs	48	Cabins	63
Interval	6.0 s	Interval	6.4 s	Interval	12.0 s
Inclined length	1,272 m	Inclined length	676 m	Inclined length	1,961 m
Vertical rise	271 m	Vertical rise	123 m	Vertical rise	311 m
Towers	14	Towers	7	Towers	12
Drive	Bottom	Drive	Bottom	Drive	Bottom
Tension	Bottom	Tension	Top	Tension	Bottom

tions for a complete modernization. Two years later we had a clear concept of the requirements to be met by the new installations." – Two old T-bar lifts were to be replaced by modern ropeways. In 2008, Doppelmayr installed the T-bar lift Pri lese and the construction of a fixed-grip quad chairlift had been considered for 2009. But finally the decision was taken to build a detachable lift instead. "We want to focus on beginners and families with children," explains Andrej Klačan. "A detachable lift is a better alternative for this target group and at the same time represents a more long-term technology."

The new 4-CLD Králiky is certainly very well equipped. It features station parking with integrated service platform in the bottom station plus a parking rail for 16 carriers. This makes it easier to run with a reduced number of chairs in the summer season when passengers mainly consist of mountain bikers. The chairs have a modern comfort suspension and

red comfort seats, and the sheave assemblies are fitted with RPDs.

Cabins with orange-tinted sun protection windows

The 8-passenger gondola lift Chopok Západ looks fantastic: black cabins with orange windows, and a matching color combination for the station design. The request for orange windows came from Ján Štětka, Technical Director at Tatry Mountain Resorts, a.s., which operates the Jasná ski resort. He got the idea after seeing a lift with orange bubbles.

This lift replaces an old 4-MGD. The lift line was extended downhill as far as the Grand Hotel. The ropeway features a semi-automatic dead-end parking facility in the top station and is equipped with the RPD system.

Despite the reduction in the number of lifts, total transport capacity in the ski area has been increased to over 3,300

PPH. Further investments include a new snowmaking system, floodlighting and a new restaurant near the bottom station.

Jasná is certainly the most well-known ski resort in Slovakia¹. It lies roughly an hour's drive northeast of Banská Bystrica on the 2,005m Chopok, the second highest mountain of the Low Tatras. The guests are mainly from the local region and in particular the nearby town of Liptovský Mikuláš, but also from Poland and western Europe, especially the UK.

The operating company, Tatry Mountain Resorts, runs two ski resorts, Jasná Nízke Tatry and Vysoké Tatry – Tatranská Lomnica. These two areas have integrated ticketing and marketing, an approach that is quite unique in Slovakia. The aim is to achieve a quality status comparable to ski resorts in the Alps.

¹ Since 2002, Doppelmayr has supplied five surface lifts, a 6-CLD-B and a 4-CLF. For 2010, an order is in hand for a 6-CLD-B-O.



Ing. Bohuš Hlavatý, Managing Director with

responsibility for general management and development of the ski resorts belonging to Tatry Mountain Resorts: "Our working relationship with Doppelmayr has always been very active and creative. We greatly value the craftsmanship, quality and perfect finish on all product details as well as the great dedication of the entire Doppelmayr team when it comes to looking for optimal solutions. In my view, Doppelmayr's capacity to communicate and their wealth of ideas are key to the best solutions in terms of quality, reliability and the effective use of financial resources."



Ing. Vladimír Čukan, project manager for all

investments in winter infrastructure at the ski resorts belonging to Tatry Mountain Resorts: "Originally, we wanted to take two years to build the Chopok gondola lift. It was only in spring 2009 that the investor, WEBIS, decided to get it done in one. This shortening of the realization period required a huge effort on the part of Doppelmayr project engineers, design engineers and fitters in particular. It has to be said that Doppelmayr's willingness to cooperate and their determination to meet the schedule were absolutely exemplary."



Roman Weck, Managing Director of WEBIS

s.r.o.: "The 8-MGD Chopok is being financed by two sources. The first is private finance; the second is the EU structural fund which in Slovakia is known as the operational program 'Competition and Economic Growth'. This program is run by the Ministry of Economic Affairs and the Tourism Agency of the Slovak Republic. The company WEBIS s.r.o. was contracted to handle the project." WEBIS put the ropeway out for tender and will initially operate the installation. Doppelmayr was subcontractor to the construction company VUMAT SK, s.r.o.

Second CABLE Liner Shuttle system in Las Vegas



Mid-December 2009 saw the opening of the biggest privately financed development in US history, the CityCenter in Las Vegas. It is here that a CABLE Liner Shuttle System from DCC Doppelmayr Cable Car provides the mainstay of public transport.

The concept behind the CLS installations is based on a high transport capacity and spacious vehicles. Stops along the line are also possible. DCC, a member of the Doppelmayr/Garaventa Group, completed this 66-million-dollar project in just three years. – This short time frame is impressive proof of the system benefits such as simplicity, reliability and short project schedules.

Gargantuan project

The overall project was built by the Mirage Group, one of the world's biggest hotel and casino operators. It encompasses 2,800 luxury condominiums, three casino-hotels with 5,000 hotel rooms and 44,000 m² of shopping malls, restaurants

and conference space. Total construction costs amounted to some 8 billion dollars.

The first CABLE Liner Shuttle was built for the same customer in 1998. Since then, it has provided reliable and comfortable transport for over 250 million passengers.

CLS MGM Las Vegas

Transport capacity	3,000 pphpd
Trip time	2.1 min
Speed	10.5 m/s
Vehicles	2 trains of 4 cars (132 passengers)
Length	650 m



The new CABLE Liner Shuttle links the MGM Mirage casino-hotels "Monte Carlo" and "Bellagio". The system features an S-shaped, in part elevated alignment and an intermediate station at the heart of the CityCenter.

30 years of the apprentice workshop at Doppelmayr

Doppelmayr has been training apprentices since the company was founded in 1892 and 30 years ago built a dedicated workshop for this purpose. Nowadays, apprentices benefit not only from their main workshop facilities for basic electrical and metalworking training but also from specialized training areas in production. These include the machine tool shop, CNC programming and machining, design engineering and structural steel fabrication which is supplemented by the use of welding robots. Doppelmayr currently has 77 apprentices.



Innovations impress at Interpin in Sochi Doppelmayr at OITAF in Rio

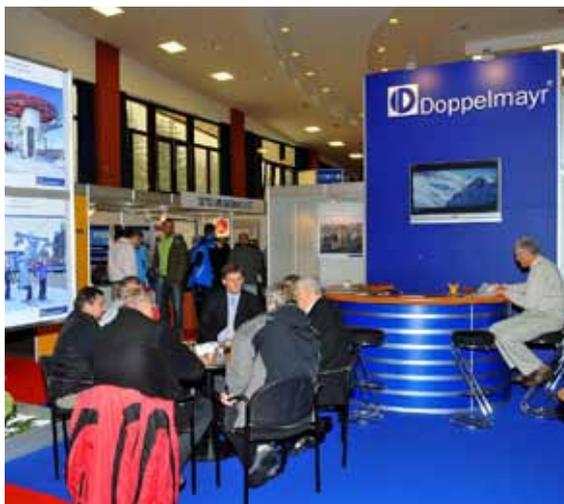
Visitors to Interpin Sochi 2009 showed a keen focus on technical innovations and were therefore particularly interested in Doppelmayr. This type of show is new in Russia and represents an alternative to the Moscow Trade Fair.



The OITAF Congress 2011 in Rio de Janeiro is to be hosted by the Sugarloaf Aerial Cableway Company. The aerial tramway on Sugarloaf Mountain was renovated in 2008/09. The ventilated cabins with tinted windows were supplied by CWA.

Doppelmayr at INTERLAVEX

The Slovakian ropeway association LAVEX staged its 12th international trade fair INTERLAVEX in Podbanske (High Tatras) to coincide with the Slovakian ropeway conference. This event is of major importance for the winter tourism sector in Slovakia.



Prize draw

This time round the quiz question is: **In which ski areas was the new restraining bar locking system plus footrests installed in 2009?**

Please e-mail your answer by April 6 to: wir@doppelmayr.com. Three lucky winners will be drawn from the correct replies. The prize for each is an iPod and the judges' decision is final.

The correct answer to our prize draw question in WIR No. 179 (September 2009) was "Durban", where Garaventa built the Moses Mabhida Stadium funicular.

Congratulations to the winner, Mr Kurt von Allmen, Operations Manager/Technical Director of Stockhornbahn AG, 3762 Erlenbach, Switzerland.