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On Monte Zoncolan, Friuli, Doppelmayr Italia has built a modern, particularly wind-stable Funifor which can carry 100 passengers. p.16



8-passenger chair and gondola lifts in Austria

A selection of fascinating projects begins on p.4

Two 8-MGDs in Val Thorens

"Unmanned" operation is a special feature. p.14

New funicular in Slovakia

Boost for tourism in the High Tatras. p.18

Gondola lift in the "Dutch Alps"

Germany's first ropeway with DSD drive is now operating in Sauerland. p.19

World first on Sachalinsk, Siberia

The first section is a gondola lift, the second a combined lift. p.20

Gondola ride above the fair park

The State Fair of Texas in Dallas has a special attraction. p.26

Orange Bubble, a world first with a bright outlook: The orange-tinted glazing of the bubbles looks great, provides optimum vision even in dull weather and creates a totally new, excitingly attractive ride experience for skiers. p.28



Combined lift replaces oldest detachable chair lift



In 2007, Garaventa installed a world first on Kleiner Gumen in the Swiss canton of Glarus: a combined lift comprised of 4-seater gondolas and cross-facing double chairs. This enables passengers to really enjoy the magnificent view down into the valley.

The car-free village of Braunwald, high above the valley floor of the Linth in the canton of Glarus, has been accessed by a funicular railway since 1907. 1948 saw the opening of the double chair lift into the ski region of Kleiner Gumen. This lift was closed down in 2005, but it was soon recognized that a lift service would need to be resumed: "The absence of the old Gumen lift in the winter seasons of 2005/06 and 2006/07 really highlighted the need for access to the Gumen area for our guests. It is an attractive destination in both winter and summer, and offers a wide range of leisure activities," explains Stefan Trümpi, board member of the lift company Sportbahnen Braunwald AG (SBAG), which operates seven lifts.

worldwide. The chairs have automatic restraining bars and fixed footrests.

Pulling the rope was a real challenge

Transporting the rope was also a special job. There is no road to Braunwald, and the funicular cannot carry such heavy loads. (The rope weighs 28.5 tons). For that reason, a track rope was installed across two towers from the opposite side of the valley, which can be reached by truck, and two track rope supports were attached to it. The new haul rope was then pulled directly from the rope drum across forest, ravines and rocks, and then rewound again at the bottom terminal of the chair lift. The actual rope pulling operation on the lift could then begin.

World first: Chairs at right angles to travel direction combined with gondolas

The new lift not only provides a new boost for the village and the ski area, but is also fascinating in terms of its technical design. For Stefan Trümpi, the most significant feature is "the fact that the chairs face at right angles to the rope axis – as they did on the old lift –, which gives passengers a marvelous panoramic view on the uphill trip, and allows the spirit and character of the much loved old Gumen lift to live on". Yet, the awareness for tradition was not the only factor which led to the development of

this lift configuration: "The narrow structure clearance meant that we could minimize the shift in the lift axis due to a rock passageway and retain a large part of the old top station. That enabled us to make significant savings in terms of transport and construction costs." The combination of cross-facing chairs and 4-seater gondolas is in fact unique

Board member
Stefan Trümpi,
Sportbahnen
Braunwald AG:
"The people from
Doppelmayr/
Garaventa were
able to translate



our wishes into reality cost-effectively through a clever combination of existing components and new development!"

2/4-CGD Gumen

Transport capacity	800 PPH
Trip time	7.8 min
Speed	5 m/s
Chairs/Cabins	63/21
Interval	36 s
Inclined length	2,033 m
Vertical rise	590 m
Towers	19
Drive	Bottom
Tension	Bottom



The bottom terminal lies at an altitude of 1314 m, the top terminal at 1904 m. The first set of figures on the new lift indicate that a huge increase in passenger volumes can be expected compared with the old lift, particularly in view of the fact that 80 percent of passengers use the lift in the winter. The gondolas were supplied by CWA.

Doppelmayr consolidates leadership of the world market

In the financial year 2006/07¹, Doppelmayr Holding AG was able to consolidate its position as world market leader with a 4.4 percent increase in sales revenues to EUR 659 million. 210 ropeway projects were realized worldwide with a workforce of 2,479 employees (previous year 2,223).

The core markets of the Doppelmayr Group remain the European Alpine countries as well as North America. Major successes in Eastern, Southeastern and Central Europe made a significant contribution to the renewed improvement in results.

High level of investment

Investments in property, plant and equipment amounted to EUR 17.4 million. The main focus of investments was on modernizing plant and equipment in order to ensure process reliability and on increased productivity.

Innovation and uncompromising quality

Permanent innovation and an uncompromising drive for quality are the aspirations which motivate Doppelmayr in its day-to-day operations. However, innovation is never pursued as an end in itself but is always targeted at concrete customer

needs and an optimal cost/benefit ratio. This enabled Doppelmayr to introduce a large number of improvements and new developments during the past financial year – culminating in the spectacular “Ferris wheels” in St. Anton am Arlberg.

New markets

The investments in products manufactured by DCC Doppelmayr Cable Car and Doppelmayr Transport Technology are now also bearing fruit.

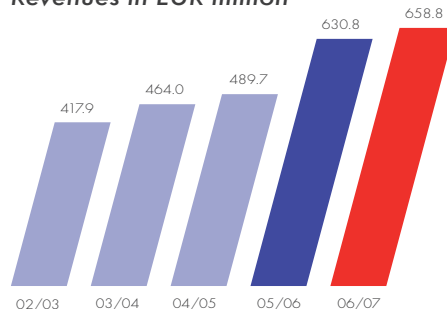
DCC built Cable Liner Shuttle systems at Toronto und Mexico City airports. In addition, three more installations are currently under construction in Las Vegas, Venice and Doha.

In the fall, Doppelmayr Transport Technology handed over the longest RopeCon installation ever built to Alcoa, one of the world’s largest aluminum producers. This installation in Jamaica is the fifth for Doppelmayr Transport Technology.

Prospects for 2007/08

Doppelmayr expects to see the positive trend of the past few years continue into the financial year 2007/08 despite the fact that price and competitive pressure remain at a very high level. At the same time, the unforeseeable price developments in the case of steel and nonferrous metals as well as the growing shortage of bought-out parts such as gear units and motors represent a certain element of uncertainty.

Revenues in EUR million



Innovation must create benefits

Permanent innovation is a major cornerstone of our daily work and is firmly enshrined in our corporate culture. We also have a very precise idea of what innovations must deliver: Every innovation must create a competitive advantage for our customers and for ourselves. Irrespective of where it takes place, innovation should never be pursued as an end in itself. Concrete customer needs and an optimal cost-benefit ratio must always be the prime considerations. It is this fundamental value of our corporate philosophy that has enabled us to set milestones in modern ropeway technology over the past years and decades. It is no secret that the needs of ropeway operators on the one hand and their customers on the other are becoming increasingly more complex.

For the Doppelmayr/Garaventa Group, this development represents both a challenge and an opportunity at the same time. Through close cooperation with our customers and by working on a cross-divisional basis within the company we are able to systematically analyze the added value required by all stakeholders and act accordingly. The result is pioneering and innovative solutions which strengthen the position of our customers and our own in a competitive market.

Michael Doppelmayr

¹ April 1, 2006 – March 31, 2007. The financial statements for the year ended 3.31.2007 were prepared in accordance with IFRSs for the first time and the previous year’s figures were adjusted accordingly.

Three 8-seater chair lifts in Austria



Doppelmayr built three 8-seater chair lifts in Austria in 2007: two in Tyrol (Kitzbühel, Mayrhofen) and one in Carinthia (Gerlitzen).

High transport capacity and wind stability plus maximum comfort are the hallmarks of these installations.

Kitzbühel: Steinbergkogel

The Steinbergkogel lift in Kitzbühel features bubbles and seat heating as well as a loading carpet and incorporates a large underground parking facility in the bottom terminal. It replaces two aging chair lifts, a single and a double dating from 1933 and 1954 respectively, and will almost quadruple their transport capacity.

The new Steinbergkogel lift provides the link between the Hahnenkamm lift and the area of Griesalm-Steinbergkogel-Ehrenbachhöhe at the heart of the ski region.

As Manfred Filzer, Director of Bergbahn Kitzbühel AG, explains, "the clear goal in building the new lift was to reduce waiting times and to increase comfort". That



Manfred Filzer, Director of Kitzbühler Bergbahn AG: "With the 8-CLD Steinbergkogel, we are enhancing the attractiveness of the

original Kitzbühel ski resort Griesalm-Steinbergkogel-Ehrenbachhöhe thanks to the comfort and increased transport capacity provided by Doppelmayr."

is why they decided in favor of a detachable 8-seater chair lift with bubbles and seat heating, particularly in view of the fact that at the height of the winter season the sun rises very late in this area and disappears behind the mountain peaks early in the afternoon.

The desire to offer the utmost in comfort was also decisive for the design of the top terminal where a strident northwest wind frequently blows. "We have succeeded in making the unloading area largely wind-proof," explains Filzer with pride.

As significant improvements have been made to the ski trails around the bottom terminal and the Ehrenbachgraben restaurant as well as to the snow-making facilities, the new lift not only helps to increase passenger frequency in the immediate vicinity but also plays its part

8-CLD-B Steinbergkogel

Transport capacity	3,255 PPH
Trip time	4.9 min
Speed	5.0 m/s
Chairs	66
Interval	8.8 s
Inclined length	1,309 m
Vertical rise	523 m
Towers	13
Drive	Top
Tension	Bottom



Steinbergkogel lift: The architectural design of the top station provides wind protection and therefore greater comfort for lift users.



Automatic locking of the restraining bars on the Ahorn lift, Mayrhofen: Chair speed is drastically reduced in the bottom station; passengers can take their places without any hurry. As the carriers pass the closing rail, the restraining bar closes very slowly, allowing plenty of time for passengers to sit comfortably. At the top station, the opening of the restraining bar is again performed automatically at very low chair speed immediately before the unloading point. Consequently, unloading is particularly stress-free. As there is no downhill service, the restraining bars remain open for the entire downhill trip

in ensuring an even distribution of skiers throughout the entire area.

Mayrhofen: Ahorn

The 8-CLD Ahorn in Mayrhofen replaces two double surface lifts which ran parallel to each other and split the ski trail in half. Building the new lift has created additional skiable area as one of the tow tracks could be dispensed with. This ski trail links up with a wonderful, gently sloping section which is very popular with children and leisurely skiers.

Special consideration was also given to the needs of children and parents with the automatic restraining bar locking system. The all-round double safety bar also helps to prevent children from slipping out

of their seats. There are no footrests, so children cannot stand up during the trip. The restraining bars rest on the thigh in the case of adults and are padded.

8-CLD Ahorn

Transport capacity	3,000 PPH
Trip time	3.2 min
Speed	4.0 m/s
Chairs	40
Interval	48 s
Inclined length	643 m
Vertical rise	106 m
Towers	7
Drive	Top
Tension	Bottom



"The most important new feature in my view is the automatic closing and opening of the restraining bars." Klaus Hanzmann, Deputy

Operations Manager for the Ahorn area at Mayrhofner Bergbahnen was site manager during the construction of the 8-CLD Ahorn.

The operating company, Mayrhofner Bergbahnen AG, was keen to continue the architectural style of the award-winning "Ahornbahn", the reversible aerial tram which Doppelmayr built the year before. The UNI-G stations harmonize visually with the neighboring tram station and are functionally well-conceived. Chair parking is split equally between the top and bottom stations. The station structures are partly integrated into the mountainside and the walls are clad with quarry stone.

Gerlitz: Neugarten 8-seater Carving Jet

From Annenheim am Ossiachersee, visitors first take the 8-MGD Kanzel lift and then the 4-CLD-B summit lift to "Carinthia's sunniest mountain", the 1,911 m Gerlitz. Another access route is the 4-CLD from Klösterle (not far from Arriach). In close proximity to the two mountain restaurants lie the top stations of several lifts, including the 8-CLD Neugarten with loading carpet which replaces a surface lift. The ropeline to the top of the mountain was extended by 70 m, now enabling skiers to take off in any direction of the compass. The chairs are parked partly in the bottom station itself and partly under an adjacent fly roof at the side. The bottom station also incorporates a service platform to which the chairs can be shunted via a dead-end rail.



CEO Hans Hopfgartner, Gerlitzen: Doppelmayr provides impressive performance and comfort.

What made the operators, Gerlitzen Kanzelbahngesellschaft, replace the old double surface lift with a high-capacity 8-seater chair lift?

CEO Hans Hopfgartner elucidates: "The slope is just made for carvers and snowboarders: 200 m wide, uniform slope, not too steep, ideal for wide, rhythmic curves. Added to this is the fact that this northwest face has plenty of snow. We have good snow conditions from November through to April and that means our capacity is well utilized.

This slope is extremely popular and attracts high visitor frequencies. That was

also the reason why we went for full transport capacity right from the start and didn't have to test our utilization rates with an initial capacity."

The decision in favor of the 8-seater was also based on comfort aspects: The interval between carriers is significantly longer than on a 6-seater lift. That gives passengers much more time for loading.

8-CLD Neugarten Carving Jet

Transport capacity	3,400 PPH
Trip time	4.9 min
Speed	5.0 m/s
Chairs	69
Interval	8.5 s
Inclined length	1,315 m
Vertical rise	288 m
Towers	12
Drive	Top
Tension	Bottom



Schmittenhöhebahn AG was awarded the "Developer's Prize of the Chamber of Architects and Consulting Engineers of Upper Austria and Salzburg" in recognition of its contribution to high-quality construction.



The 2,000 m high Schmitten – the local mountain to Zell am See – acquired two new lifts in the winter season 2007/08: the 8-seater gondola lift trassXpress and the detachable Breiteck lift with 6-seater bubble chairs. "This represents the logical continuation of our quality drive," explains Schmitten's Director Hans Wallner.

The Neugarten lift is Carinthia's first 8-passenger chair lift. Innovation leadership is a tradition on Gerlitzen Mountain: The first 4-seater gondola lift in Carinthia – the Kanzel lift built in 1987 – was also installed here.



Zell am See: The quality drive continues

The trassXpress is used as both a feeder and an activity lift. It relieves the "Schmittenhöhebahn", a 56-passenger reversible aerial tramway originally built in 1927 and modernized many times since. The Breiteck chair lift replaces a triple chair and a surface lift, and is used entirely to serve the adjacent ski slopes.

Bottom stations in close proximity to each other

The bottom stations of the tram and the trassXpress are located in close proximity to each other near the village outskirts at the end of the Schmitten Valley. The loading and unloading areas are at the same level, connected by a bridge and built for good accessibility from the parking lot as well as from the slope. Steps lead from the parking lot to the tramway station; from the ski slope, access to boarding level is via a bridge. The tramway building houses offices, while garages and the

service yard are located in the basement of the trassXpress.

Both the tramway and the new gondola lift go up to the top of the mountain. The liftlines are separated by a wooded rift valley. The top station of the trassXpress, which lies at a slightly lower altitude, is right next to the top station of the third leg of the Areit lift (a 6-seater gondola lift

supplied by Doppelmayr in 1996) and the new Breiteck lift. In this part of the terrain the layout has been completely redesigned. Thanks to the new Breiteck lift, the old lift structures could be demolished; the new lifeline is located at the edge of the ski trail. A common plateau was built for all the stations. In terms of their architecture, the new stations are all cast in the same mold. They are open and airy, harmonize with the natural landscape and fully meet the lift company's desire for sustainability, efficiency and aesthetics.

Heated seats: world first for gondolas

Both new lifts have heated seats. The length of the trassXpress means that the carriers are parked in the level garaging facility in the bottom station as well as in the basement facility in the top station. The Breiteck lift uses a parking facility in the basement of the top station. The gondolas on the trassXpress are illuminated and equipped with a PA system as the lift also serves the mountain restaurant which often stays open at night.

Schmitten in Zell am See is an all-year tourist region. 27 lifts operate in the winter, five in the summer. In the winter season 2006/07, 760,000 overnight stays were recorded, compared with just under 620,000 in the 2007 summer season.

8-MGD-S trassXpress

Transport capacity	2,400 PPH
Trip time	9.0 min
Speed	6.0 m/s
Cabins	89
Interval	12.0 s
Inclined length	2,847 m
Vertical rise	985 m
Towers	31
Drive	Top
Tension	Bottom

6-CLD-S Breiteckbahn

Transport capacity	3,200 PPH
Trip time	3.8 min
Speed	5.0 m/s
Chairs	68
Interval	6.8 s
Inclined length	1,033 m
Vertical rise	225 m
Towers	11
Drive	Top
Tension	Bottom

Four lifts in Vorarlberg



In 2007, Doppelmayr built three chair lifts and one gondola lift in Austria's western province of Vorarlberg.

Investments in the expansion of ski trails and snow-making equipment are to accompany the new ropeways.

Damüls, Mellau: Looking ahead to a dazzling future

Once the authorities had given the go-ahead for the merger between the ski resorts of Damüls and Mellau (Bregenzerwald) the first of three expansion phases to link up the two areas was implemented. Doppelmayr installed two detachable 6-seater chair lifts in 2007.

Expansion of the ski region in three phases

The Elsenkopf and Hohe Wacht lifts were completed as the first phase. These lifts enable skiers to use the Hintere Argenalpe basin. At the moment, it is only



Wolfgang Beck, MD of Damülser Seilbahnen GmbH & Co: "Our company was founded 50 years ago and since then we have always been a satisfied Doppelmayr customer."

possible to get there from Damüls using the UGA-Express (4-CLD-B). The Elsenkopf lift is located on the Damüls side, the Hohe Wacht lift on the side facing Mellau. Both lifts serve both ski slopes which can be used for repeated descents.

As from the winter season 2008/09, it will be possible to access the Hohe Wacht top station using the 8-MGD Gipfelbahn from the Mellau ski area. There will then also be a reliable ski route to

The Elsenkopf lift is the world's first 6-CLD with bubbles and fully automatic station parking (bottom and top).



Mellau. This will be expansion phase 2. The third phase of the expansion will consist of the 6-CLD Ragazer Blanken which will serve the Ragaz Hollow in the Damüls ski area. This lift can be reached using the 6-CLD Hasenbühel (built by Doppelmayr in 2001).

Discussion with the Environmental Ombudsman

The Mellau-Damüls "Skischaukel" combination and the expansion of the ski region it will require was first discussed 25 years ago and more avidly over the course of time. The project was approved by the administrative authority for the district of Bregenz in 2006, but appeals were lodged through the courts by the Environmental Ombudsman. Finally, the objections of the Office of the Environmental Ombudsman were rejected by

the Higher Administrative Court – one of Austria's three higher courts.

Wolfgang Beck, Managing Director of the lift company, Seilbahnen Damüls, shakes his head when the environmental objections are mentioned: Nobody in the Vorarlberg tourist industry would want to

jeopardize their very existence by doing anything which is harmful to nature. "We know that our guests are sensitive about this issue. They want to see an intact natural environment."

Beck was able to count on Doppelmayr's support in rapidly providing the required

6-CLD-B Elsenkopf	
Transport capacity	2,800 PPH
Trip time	2.7 min
Speed	5.0 m/s
Chairs	42
Interval	7.7 s
Inclined length	701 m
Vertical rise	218 m
Towers	8
Drive	Bottom
Tension	Bottom

6-CLD Hohe Wacht	
Transport capacity	2,800 PPH
Trip time	3.8 min
Speed	5.0 m/s
Chairs	60
Interval	7.7 s
Inclined length	1.038 m
Vertical rise	372 m
Towers	12
Drive	Bottom
Tension	Bottom



documentation and accompanying him to meetings with the authorities. Such actions are a matter of course, and not just in Damüls and Mellau. The spectrum of services offered by Doppelmayr has always covered a wide range and encompasses the entire project, not merely the optimization of the liftline and the technical hardware.

Brandnertal kicks off modernization program

Bergbahnen Brandnertal placed orders for two Doppelmayr lifts in 2007: the 8-MGD "Dorfbahn", which went into service last November, and the 6-CLD-B Palüd lift, which is due for completion in

The bottom stations of the Elsenkopf and Hohe Wacht lifts stand side by side. The chairs on the Hohe Wacht lift are parked in the bottom station, in part on a dead-end rail with a fly roof and partial side cladding.



Director Eugen Nigsch, Bergbahnen Brandnertal AG:
"It has been my experience that Doppelmayr is a reliable and above all

fair partner in the project planning phase, during the construction and when the lift is in operation."

winter 2008. The Dorfbahn replaces the Niggenkopf Lift 1, a double chair lift built in 1984, while the Palüd lift replaces another double chair lift dating from 1969. All-year operation is planned for the Dorfbahn which serves as a feeder for guests staying in Brand. The Palüd lift is only expected to run in the winter and will mainly be used by day-trippers, particularly in view of the ample car parking facilities

which have been created immediately next to the bottom station.

As Director Eugen Nigsch explains, the situation had been the same in both cases: The old lifts were no longer able to meet today's requirements in terms of capacity, quality and comfort.

Significantly more comfort

Extending the Dorfbahn by almost 400 m meant that it could share the top station with the "Panoramabahn", the reversible aerial tramway to Bürserberg. The bottom station of the 6-CLD Gulma (built by Doppelmayr in 1998) is also close by.

The new bottom station in the village center is described by Eugen Nigsch as "a service hub where visitors can find everything they need for a good day's skiing or for their ski vacation: ticketing, ski school, café, sports shop, sports equipment hire,

lockers, etc." Here too additional parking space has been created.

This project has been a resounding success, Eugen Nigsch assures us. "We have been able to achieve an optimal benefit for our guests for minimum cost." The fact that both installations were awarded to Doppelmayr was "the result of a long-standing and excellent working relationship. Doppelmayr provided us with support right from the project planning stage".

Strong momentum for the economy of the entire region

Director Eugen Nigsch points out that expansion of the lift and ski trail infrastructure was absolutely essential in order to be able to compete with neighboring ski regions.

The lift company's goal is to increase



The Dorfbahn has automatic station parking and the latest generation RPD system.

8-MGD Dorfbahn

Transport capacity	2,389 PPH
Trip time	3.2 min
Speed	6.0 m/s
8er-Cabins	41
Interval	12.1 s
Inclined length	1,119 m
Vertical rise	390 m
Towers	10
Drive	Top
Tension	Bottom

visitor numbers by 15 to 20 percent, the equivalent of up to 50,000 first-time visitors a year.

The momentum generated for the local economy is hard to miss. Recently, for example, one of several construction projects, the "Mountain Lodges", was completed. This encompasses 31 holiday apartments in five houses. An extra 1,000 beds are envisaged over the next five years.



Anton Haller: "In keeping with our family's business policy, contracts are awarded to domestic companies because we place great

importance on quality. That is what Doppelmayr delivers in every respect." In the interests of tourism development in the Kleinwalsertal, future projects will continue to be achieved in collaboration with Doppelmayr.

Heuberg: Emphasis on families

The 4-CLD-S Heuberg replaces a single-seater chair lift dating back to the early 1950s. It features lockable restraining bars and heated seats. The Hirschegg ski area was acquired by Mittelberg hotelier

Anton Haller (Aparthotel Kleinwalsertal) in 2006. It starts in the center of the village, includes five surface lifts in addition to the Heuberg lift and is largely frequented by families. This was also one of the main reasons for choosing chairs with automatic locking of the restraining bars and no footrests, which are largely aimed at the safe transportation of children.

More operating days

At the same time, the Haller family is investing in snow-making systems. The aim is to achieve between 100 and 110 reliable operating days. It is hoped that weather-related downtime such as in 2006/07 when it was only possible run on five days will become a thing of the past. Nonetheless, this downtime did not prove disastrous as the Heuberg lift also operates in the summer and provides

access to an extensive hiking region: Hirschegg lies in the very heart of Kleinwalsertal, the biggest Austro-German ski region which also includes Oberstdorf. The Heuberg lift is an important link in the ski circuit connecting the villages of Riezlern, Hirschegg and Mittelberg.

4-CLD-S Heuberg

Transport capacity	1,200 PPH
Trip time	3.1 min
Speed	5.0 m/s
Chairs	30
Interval	12 s
Inclined length	760 m
Vertical rise	239 m
Towers	9
Drive	Top
Tension	Bottom



4-CD-S Heuberg, Hirschegg, Kleinwalsertal, with lockable restraining bars and seat heating

The attraction of continuous development



"We offer our guests something new every year." That's how Hannes Parth, Director of Silvretta Seilbahn AG Ischgl, sums up the success formula of the Ischgl lift operators.

As well as having a reputation for being an excellent region for winter tourism (and as a place well worth visiting in the summer), Ischgl is also well-known for getting better all the time.

Director Hannes Parth, has placed his trust in Doppelmayr for 20 years.



The region's attractiveness is largely attributable to its 200 kilometers of ski trails and 40 lifts belonging to the "Silvretta Arena Samnaun/Ischgl". The Silvretta Arena was created through the merger of the ski resorts of Ischgl (Austria/Tyrol) and Samnaun (Switzerland/Graubünden).

Ischgl: Image building through technical advance and comfort

What is it that had made the Ischglers (and the Samnauners) trust exclusively in Doppelmayr (and Garaventa) quality over the decades? The longer-standing member of the board, Hannes Parth, who has been involved with awarding lift contracts virtually since joining Silvretta Seilbahn AG in 1982 and director since 1987, explains: "I always want the best." – Ischgl is famous for being one of the first ski resorts to have used only detach-



Director Markus Walser also praises Doppelmayr's reliability.

able chair lifts. "And what's more, I want maximum availability. For me, that's more important than the first price." That also goes for his five lift managers, especially as "Doppelmayr service is there when you need it. Plus, I have one contact for everything".

Positive assessment of Doppelmayr

The positive assessment of Doppelmayr is also shared by fellow director Markus Walser, who has been on the board since 2005. Walser praises the on-time delivery, the attention to detail and the professional assistance provided during the approval application process. He has lasting memories of the most recent project, the Fimba lift: "The Doppelmayr crew defied the adverse weather conditions – we had rain or snow in almost every one of the 30 weeks they were working. But despite everything they again delivered an attractive and ultra-modern ropeway installation exactly on time for Ischgl."

World first: 8-MGD with seat heating

The Fimba lift, an 8-MGD with seat heating and comprised of two sections, replaces a 6-seater monocable gondola lift originally built in 1983.

The difficult conditions of the terrain posed a particular challenge for the project engineers and the construction teams. In section 1 the rope axis runs along vertical rock faces. As there were no alternatives for the tower locations, parts of the foundations for the old 6-seater gondola

8-MGD-S Fimbabahn

	Section 1	Section 2
Capacity	2,800 PPH	2,800 PPH
Trip time	6.7 min	8.4 min
Speed	5.0 m/s	5.0 m/s
Cabins	78	97
Interval	10.3 s	10.3 s
Incl. length	1,647 m	2,141 m
Vertical rise	260	690
Towers	15	14
Drive	Top	Top
Tension	Bottom	Bottom



Fimba lift: The main reason for deciding on the new lift was the desire to provide enhanced comfort; the increase in capacity – by 400 to 2,800 PPH – carried less weight.

lift had to be used. That was no easy undertaking in view of the fact that greater design forces and new regulations from the authorities had to be taken into account.

Adjustable towers

Some of the towers in section 2 are located in unstable terrain. Ground movements are compensated by adjustable towers. Embedded in the foundations are steel rails in the shape of an inverted “T” to which the towers are fixed by means of

nuts and anchor bolts. If required, the bolt fastening can be loosened and the tower shifted along the rail.

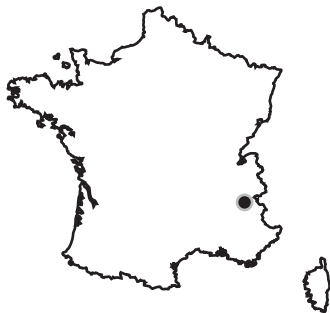
The existing buildings were converted for the bottom and intermediate stations. The top station is new and has three base-level levels. The gondolas are parked in the garaging facility on the first level below ground in the intermediate station as well as on a short dead-end rail in the bottom station. The drive unit for the first leg is located in the intermediate station, the hydraulic haul rope tension system is housed in the bottom station. The drive

for the second leg is located in the top station and its haul rope tension system is also in the intermediate station.

Doppelmayr was responsible for the ropeway equipment including the electrical installations. Silvretta Seilbahn took charge of the construction work and coordination. This work was split between a contractor and their own team. The company employs 140 people on a permanent basis who are supplemented in the summer by around 40 and in the winter by some 220 seasonal workers (for lifts and hospitality).

New lifts in Val Thorens: “Unmanned” operation

In Val Thorens in the French Alps, two existing 6-seater gondola lifts have been replaced with two modern 8-seater installations. The aim was to improve comfort and transport capacity. A special feature of the new lifts is the newly developed “unmanned” operation



Jean-François Piard, Technical Director at SETAM: “We’re very happy with Doppelmayr, both in terms of on-time delivery and product and service quality!”



As the highest village at the heart of the “3 Vallées” ski region, Val Thorens boasts a whole series of superlatives: In addition to its claim to being the biggest ski area in the world, it offers a breathtaking view of 1,000 mountain peaks belonging to the French, Swiss and Italian Alps. It is also the highest all-year ski area in Europe. The ski slopes extend over an area ranging between 1,300 m and 3,200 m in altitude; the village itself lies at 2,300 m¹.

Higher transport capacity, high comfort

When designing the two new gondola lifts Cairn and Caron, the emphasis was not only on increasing transport capacity – now almost twice what it was before – but also on optimal comfort both on the line and in the stations, as Jean-François Piard, Technical Director of the lift operating company SETAM, is keen



to stress. The stations incorporate escalators, waiting areas, toilets and ATMs, and also provide a venue for art exhibitions. Special features have been included to

cater for handicapped passengers: 10 percent of the cabin bench seats fold away; all the cabins have call buttons allowing handicapped passengers to call for assistance when disembarking if required.

The two lifts provide access to opposite sides of the mountain valley and form a classic ski circuit. The bottom stations are

	8-MGD Cairn	8-MGD Caron
Transport capacity	2,400 PPH	2,000 PPH
Speed	6 m/s	6 m/s
Trip time	4.1 min	5.35 min
Cabins	58	54
Interval	12 s	14.4 s
Inclined length	1,102 m	1,478 m
Vertical rise	190 m	220 m
Towers	11	12
Drive	Bottom	Bottom
Tension	Bottom	Bottom



The new 8-seater gondola lifts Cairn and Caron in Val Thorens replace two 25-year-old 6-seater circulating lifts. As well as increasing transport capacity, one of the main aims was to improve comfort. Skiers take their skis with them in the cabins. Photo: the joint station building

housed in one building but there is no cabin transfer. There would be no point as the lifts are only used for uphill transportation. The top station of the Caron lift is located in close proximity to the bottom station of the reversible aerial tramway to the 3,200 m Cime Caron. Here again, the stations are accommodated in a common building; it was originally built in 1981 and has now been adapted to suit the new requirements. Operation of the new gondola lifts is virtually “unmanned” as there is only one

operator in the top station of the Caron lift. He has audiovisual contact with the three other stations. Special safety devices enable the cabins to be operated in this mode. It is nonetheless also possible to run with operating crew in each station².

Crossing other lifts

Quite apart from the special feature of unmanned operation – which required very intensive collaboration with the au-

thorities during the development phase – there were other technical challenges to master. As the Cairn gondola lift shares a tower with the Plain Sud lift which it crosses, the tower had to be rebuilt and increased in height. The Caron lift crosses beneath the Moutière chair lift.

¹ The entire ski region encompasses 16 villages and offers 600 km of prepared ski trails as well as 200 lifts.

² We shall be taking a closer look at this mode of operation in a forthcoming issue of WIR Magazine.



By Funifor to Monte Zoncolan

**Doppelmayr
Italia replaced
the 40-passenger
reversible aerial tram
from Ravascletto in
the Valcalda Valley
to Monte Zoncolan,
Friuli, with a modern,
100-passenger Funifor.**

Monte Zoncolan is one of the best developed ski regions in Friuli-Venezia Giulia with 28 kilometers of ski trails and a particularly spectacular view of the mountain peaks of the Carinthian and Julian Alps which line the Austro-Italian border. The Zoncolan resort has 12 lifts. Its centerpiece is the new Funifor which replaces a 40-year-old tram. The contract was placed by Promotur SpA, a stock company formed by the Provincial Government of Friuli-Venezia Giulia in 1986 and based in Udine. Its role is to support development programs for the mountain regions - which includes the five ski areas¹.

The new tramway has an "optional" mid station which is only used for unloading to reach a downhill run to the bottom station. For next winter a ski trail from the top station to the bottom is planned; then the tram can be used for repeated uphill trips and not just as a means of transport to and from the ski slopes. In the summer the mid station is used as a starting point for mountain hikes.

Tower as mid station

When planning the top station, the project engineers had to make sure that the new tram remained completely within the



The mid station is integrated into the 16 m high tower. Doppelmayr Italia delivered the installation on a turnkey basis as general contractor. The tramway is a key element in the overall plan for upgrading the ski resorts in Friuli.

dimensions of the existing building. The same applied largely for the bottom station. The mid station is new; the hinged service platform, level access and the enclosed control room are integrated into the tower. The stations have been constructed in compliance with the new earthquake regulations, which made reinforcements necessary in some cases. The track ropes have fixed anchoring in the stations. The haul rope tension system and the two independent drive units are located in the bottom station. The steep gradient of the tram makes very large flywheel masses necessary on the drive. The haul rope loop has an automatic, hy-

draulic adjustment system to compensate for thermally induced length variations and permanent lengthening. The project engineering was performed in compliance with the CEN directive, while adherence to the Italian regulations was also necessary for the infrastructure.

Added value for winter and summer tourism

For Casanova Imler, Manager of the Ufficio Tecnico at the Promotur headquarter, the new Funifor is very important for several reasons. Thanks to the mid station, he expects to see a significant boost to



summer tourism, particularly as this provides convenient access to the nearby Cuel Piciul chair lift. The high wind stability² of the tramway installation increases ride comfort for the users and reduces the probability of weather-related downtime. As the two sections are mutually independent but operate synchronously, each of them can be immediately operated autonomously if required. That means a huge increase in flexibility for the system as a whole.

"... really pleased!"

Summing up, Imler acknowledges that from a technical and logistical point of view and in terms of the structural development, Doppelmayr has successfully developed and implemented an exceptionally complex project. This, coupled with their adherence to all the quality and deadline requirements – within a very tight timescale – has gained his great respect. "I'm really pleased. Everything was finished exactly as it should be and exactly on time!"

¹ Zoncolan, Forni di Sopra, Piancavallo, Tarvisio and Sella Nevea

² On a Funifor the track formed by the two track ropes is wider than the cabins; this makes the tram particularly wind-resistant.

100-FUF Valcalda – Monte Zoncolan

Transport capacity	1,200 PPH
Trip time (with 56 s stop in the mid station)	5.0 min
Speed	12.0 m/s
100-pax cabins	2
Fully locked track ropes	63 mm
Haul rope	26 mm
Inclined length	2,018 m
Vertical rise	824 m
Towers	1
Drive	Bottom
Tension system (haul rope)	Bottom

Modernization of the funicular St. Smokovec – Hrebienok



The funicular railway from Stary Smokovec, the main town among the surrounding municipalities of the High Tatras, and the mountain village of Hrebienok first went into operation in 1908. Since then it has undergone various renovations and was completely modernized in 2007. It now complies with CEN standards.

The small town of Stary Smokovec on the Slovakian side of the High Tatras is roughly three-quarters of an hour's drive away from the Polish winter sport resort of Zakopane. Here, as in Hrebienok, there are lifts and ski trails. Hrebienok lies at an altitude of 1,285 m at the foot of Slavkovsky Smokovec (2,452 m). The old tram had 128-passenger cars with raked seating; the new cars can carry 160 passengers. Travel speed has been doubled. In view of the fact that the track has a very low gradient and a funicular does not have a counter rope, the design had to be very meticulous to ensure optimal braking characteristics.

Important for tourism and as a transport route

Garaventa was responsible for the ropeway technology; the control system was supplied by Doppelmayr. The customer took care of laying the track and refurbishing the buildings.

The new cars are longer and wider, which meant that the bays had to be widened; the stairways were rebuilt and new cash desks installed. Further modernization measures are planned. As project manager Vladislav Beka¹ explains: "The old installation operated for almost 40 years. So it was time to offer our customers a higher level of quality and comfort."

In addition, there are plans to widen the ski trail from Hrebienok to Smokovec. This is another reason for increasing transport

capacity, particularly in view of the great popularity of the natural toboggan run alongside the route of the funicular. – Up to now, however, passenger numbers have been higher in the summer than in the winter because of the many hikers. For Hrebienok in general and the chalets in the mountains, the funicular is of great importance because in winter when the road is not cleared it is the only transport route to the community. From Hrebienok, supplies are then delivered to the mountain chalets by porters.

The installation work took eight weeks and the funicular was able to resume operations at the end of December following a three-month shutdown. Vladislav Beka believes that the professionalism of the people from Doppelmayr/Garaventa and "their willingness to help at any time" were key to the smooth handling of the project. The ropeway specialists worked exceptionally well with the team he coordinated and managed.

¹ Mgr. Vladislav Beka works for the J&T Real Estates Group whose core business is the financing and development of industrial, tourism, real estate and logistics projects. J&T was awarded the contract for the modernization project by the owner and operator of the funicular, TLD Tatranske lanove dráhy a.s.



Praises the dedication and competence of Doppelmayr and Garaventa: Project manager Vladislav Beka from J&T Real Estate (right) with project manager Andrej Hudek jun. (left) and the Technical Director of the operating company TLD, Dusan Slavkovsky (center). The funicular railway St. Smokovec – Hrebienok is the first in Slovakia which is designed to accommodate handicapped passengers.

160-FUN St. Smokovec – Hrebienok

Transport capacity	1,300 PPH
Trip time	4.8 min
Stopping time in stations	2.7 min
Speed	
Line	10 m/s
Bypass	7 m/s
160-pax cars	2
Inclined length	1,937 m
Vertical rise	247 m
Drive	Top
Continuous	550 kW
Start-up	700 kW

A gondola lift for the “Dutch Alps”



The Ettelsberg on the border of Sauerland, North Hesse, – center of the “Willingen Leisure World” and the “Willingen Winter Park” – has acquired a new 8-seater gondola lift.

The municipality of Willingen is a popular tourist destination. Around 20 million people live within a radius of 200 kilometers.

The ski resort of Willingen has 13 lifts which form part of an integrated system. Willingen belongs to the Sauerland winter sports region comprised of 51 – mostly small – ski resorts and 150 lifts. For 37 years, Willingen’s 838 m local mountain, the Ettelsberg, was accessed by a double chair lift which carried over 7 million passengers during that time. This lift and another double chair lift built in 1978 have now been replaced by a modern gondola lift.

As the chair lift also attracted high passenger volumes in the summer, demolition was postponed until November 5 and the gondola lift was built parallel to the old lifeline. The station buildings are

also new. In addition to the ticket desk and offices, the bottom station houses ski and bike hire (bikes are transported in the cabins), a ski school and a paragliding school. Not far from the top station is “Siggi’s Hütte”, a popular bar for excursions and events.

First DSD drive in Germany

The 8-MGD is equipped with a DSD drive. This is comprised of eight independent “segments” (motors), ensuring very high availability. – Even if one segment should fail, Willingen has enough torque to continue running the lift. Moreover, the noise level of this motor is 50 percent less than that of a conventional motor. For the next winter season, the towers are to be fitted with floodlights for night-time skiing. A fully automatic continuous loop parking facility is located in the bottom station building. Carrier parking, ski hire, cash desk building and the platform area are all covered by a common barrel roof.

Doppelmayr supplied the ropeway technology while the lift owner, Ettelsberg Seilbahn GmbH & Co. KG, was responsible for organizing the construction and civil engineering works.

Jörg Wilke, Managing Director of the Ettelsberg lift operating company: “As operators, we attach great importance to safety and availability. This is where the RPD system, which helps to prevent deropement, is crucial, especially as we often encounter strong winds.”

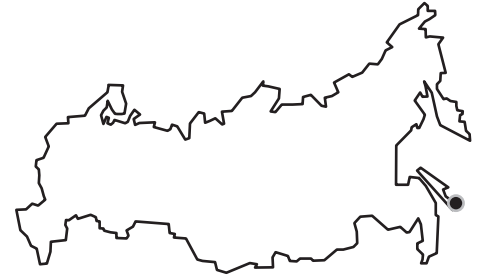


The flexibility of the gondolas is big hit. Baby strollers, mountain bikes, toboggans, wheelchairs, etc. can all be transported without any problem.

8-MGD Ettelsbergbahn

Transport capacity	2,800 PPH
Trip time	4.7 min
Speed	6.0 m/s
Cabins	55
Interval	10.3 s
Inclined length	1,340 m
Vertical rise	238 m
Towers	11
Drive 384/403 kW	Top
Tension	Bottom

World first in Russia's Far East



In Far Eastern Russia, on the Pacific island of Sachalinsk, Doppelmayr has built two sections of a very unusual ropeway:

The first section is a gondola lift only, while 6-seater chairs are added in the second section.

The lift provides access to a popular all-year recreation area on the edge of the 150,000-inhabitant city of Jushno-Sachalinsk. Here, in the western part of the two mountain chains which ring the island, there was already a small ski area with two surface lifts.

The economy in and around the city is booming following the exploitation of



large offshore oil fields near the coast. Sachalinsk is the region with the highest level of foreign investment in Russia and even outstrips Moscow.

The city invests in its tourism

Thanks to its booming economy, the city has money available which can also be invested in its tourist infrastructure. The new lift installation represents a significant up-

grade for the ski area as a whole. New ski trails have also been added, offering slopes for all levels of skiing ability.

6-seater chairs are attached between the gondolas

First, an 8-seater gondola lift brings passengers to the intermediate station where



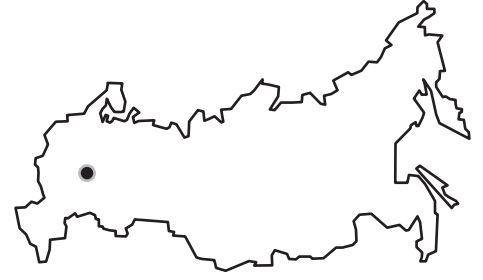
the liftline is angled at 27.6°. The gondolas travel on without stopping, while a 6-seater chair can be inserted between them for skiers who prefer not to remove their skis. The chairs only circulate in section 2; the downhill trip is made either on skis or by taking the gondola; it is not possible to load in the intermediate station.

Logistical feat

The city fathers of Jushno-Sachalinsk are particularly proud of their new lift installation. First of all, it was thanks to the vigorous intervention of the city administration that the project finally came about after several years of to-ing and fro-ing by private investors. Second, their selection of Doppelmayr as ropeway supplier turned out to be a particularly wise move: They became the first in the world to get a lift that unites the benefits of a combined lift and a gondola lift in one. And thanks to Doppelmayr's experience, transporting the ropeway equipment over the vast distances right across Europe and Siberia – by land and sea – and building the lift in this far-flung region were handled to the customer's full satisfaction.

Jushno-Sachalinsk	8-MGD Section 1	6/8-CGD Section 2
	Through operation	Separate operation
Transport capacity	1,143 PPH	2,000 PPH
Trip time	4.8 min	4.2 min
Speed	6.0 m/s	5.0 m/s
Cabins/Chairs	23	20/20
Interval	25.2 s	12.6 s
Inclined length	1,357 m	964 m
Vertical rise	190 m	305 m
Towers	8	7
Drive 252/344 kW	Top	Bottom
Tension	Top	Bottom

Indoor ski center in Moscow – a huge multi-purpose complex



Private investors have built an enormous winter sports and wellness complex near Moscow. At its heart is Europe's biggest indoor ski center. Doppelmayr supplied a fixed-grip quad chair and a double surface lift.

The "Snej.Kom" on the northeastern outskirts of Moscow in the region of Kransogrosky, can be reached via the Volokolamskyoye-Shosse, an inner-city highway, by private car or using the "Marschrute", a regular shared taxi service. The reinforced concrete structure curves elegantly upwards on free-standing columns like a colossal ski jump. The slope is 350 m long and 60 m wide; its highest point stands 90 m above the ground. The gradient ranges between 10 and 28 percent. The cooled part of the interior is 12 m high. The facility can ac-

commodate 680 skiers.

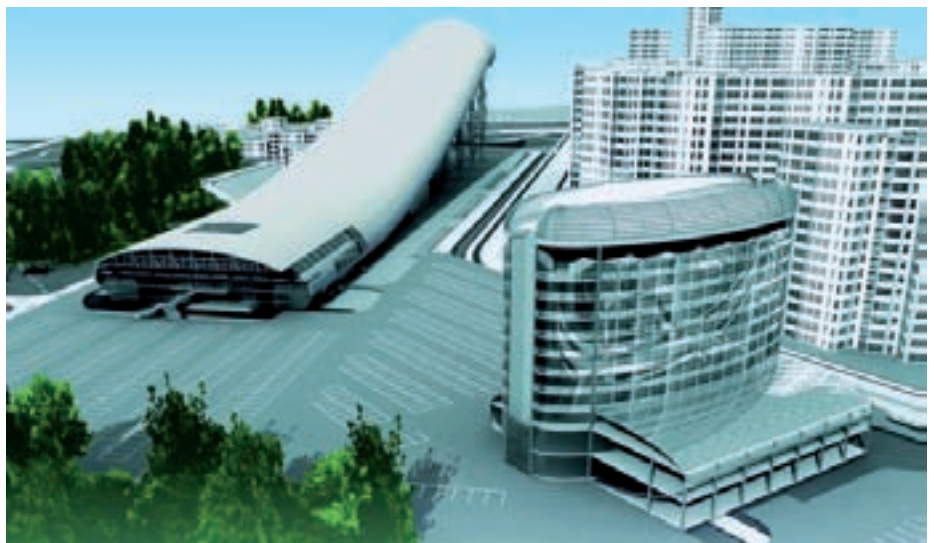
It will come as no surprise to find that all ski equipment is available for hire or that there is a choice of restaurants of various categories. However, as the center aims to offer action not only for the ski enthusiasts in the family, the four floors with a total surface area of 15,000 m², also include a 1,800 m² skating rink, shops and a hotel offering wellness and seminar facilities. Over the course of the next few years an entire satellite town is to be created around the Snej.Kom complex.

4-CLF Indoor Lift No. 1

Transport capacity	2,229 PPH
Trip time	3.1 min
Speed	1.8 m/s
Chairs	60
Interval	6.5 s
Inclined length	336 m
Vertical rise	69 m
Towers	4
Drive 54/77 kW	Bottom
Tension	Bottom

2-SL Indoor Lift No. 2

Transport capacity	1,206 PPH
Trip time	2.3 min
Speed	2.5 m/s
Gehänge	47
Interval	6.5 s
Inclined length	341 m
Vertical rise	70 m
Towers	4
Drive 31/36 kW	Bottom
Tension	Bottom



The Snej.Kom will not be the only indoor ski center in the region: Three others are already under discussion; there are also several dozen small ski resorts dotted around Moscow.



8-MGD LWI to Huangshan

Ropeways to China's most scenic mountains

In 2007, Doppelmayr completed three ropeways in China. This takes the number of Doppelmayr installations operating in the People's Republic of China to forty.

The Huangshan massif, in Anhui Province, is one of China's most important natural monuments, a world cultural and natural heritage site.

The mountain range is part of the Wu yue Mountains. It is said that you won't want to visit any other mountains after seeing Wu yue, but you won't wish to see even Wu yue after returning from Mt. Huangshan.

8-MGD LWI to the "loveliest mountain of China"

Just ten kilometers from the 6-MGD built in 1996, Doppelmayr has now installed a second gondola lift, the 8-MGD-LWI Huangshan 1A. The provincial government saw its construction as a necessity in view of the huge numbers of tourists – mainly Chinese but also Japanese and



lift. The area lies roughly two and a half hours by car and three hours by train to the north-east of Harbin amid low, pine forest covered mountains which are a subrange of the Changbai Mountains. Visitors can enjoy some 2 hectares of skiable area, a dozen trails and 17 lifts. Four of these are from Doppelmayr: the new 4/6-CGD as well as a 6-MGD and two 2-CLFs built in 1995. Most of the other lifts are considerably older. The Asian Winter Games were held here for the second time in 2007 and Yabuli will host the Winter Universiade in 2009. The ski resort is rapidly expanding. One part of the area is owned by private investors, another larger part by the state. The Chinese national team also trains here. At the same time, the area is attracting growing numbers of summer tourists.

8-MGD boosts tourism in Sangjingshan

At the end of 2007, an 8-MGD from Doppelmayr went into operation in Sangjingshan, Jiangxi Province (Eastern China), 300 kilometers east of Hong Kong. This mountain region ranks amongst the most picturesque that China has to offer: 140-million-year-old granite formations, dark forests and ravines form a wonderful and mysterious landscape where major Taoist stone structures are also preserved. The provincial government has applied for recognition as a UNESCO world heritage site.

The region has been developed for tourism over the past ten years and is becoming increasingly popular. This is also the reason why the decision was taken to supplement the existing 2-passenger basket lift with the new lift, thus providing an additional means of transport to the mountain region. Viewed from the national highway, the lower terminal of the basket lift lies at the back of the mountain, while the bottom station of the new lift is located at the front. This means it is no

longer necessary to travel the 20 kilometers of narrow country road around the mountain to reach the ropeway. The project is a joint venture between the government and a private investor.

8-MGD-LWI Huangshan 1A

Transport capacity	2,000 PPH
Trip time	8.3 min
Speed	6.0 m/s
Carriers	69
Interval	14.4 s
Inclined length	2,642 m
Vertical rise	775 m
Towers	18
Drive	Bottom
Tension	Top

4/6-CGD Yabuli Shuttle Express

Transport capacity	2,475 PPH
Trip time	5.5 min
Speed	5.0 m/s
Carriers	90 + 15
Interval	6.2 s
Inclined length	1,344 m
Vertical rise	163 m
Towers	12
Drive	Bottom
Tension	Bottom

8-MGD Sangjingshan Jinsha

Transport capacity	1,200 PPH
Trip time	8.2 min
Speed	6.0 m/s
Carriers	42
Interval	24 s
Inclined length	2,656 m
Vertical rise	890 m
Towers	19
Drive	Bottom
Tension	Top

Koreans as well as some Americans and Europeans – who flock to the area. Every year, one million visitors used the existing lift, and had to expect waiting times up to three hours!

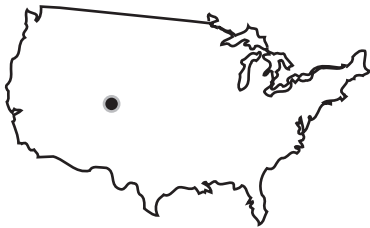
The construction work for the new gondola lift proved particularly challenging as a result of the difficult terrain and the environmental protection requirements. A material ropeway was installed for this purpose.

Combined lift for the world ski championships

In Yabuli, Shanxi Province, which is one of China's most well-known ski resorts, Doppelmayr installed a 4/6 combined

Fun in Beaver Creek

Beaver Creek, Colorado, offers two new high-performance 8-passenger gondola lifts from Doppelmayr CTEC: Riverfront Express Gondola and Buckaroo Express Gondola; the latter is proving a great asset for the local ski school classes.



George Hudspeth, Director of Lift Maintenance at Beaver Creek, has trust in the quality of Doppelmayr technology.



The Riverfront Express Gondola provides the shortest and most convenient connection between the town of Avon and the most popular ski trails on Beaver Creek Mountain. The gondola route crosses the Eagle River, a bike path, a local access road and a state highway. This added to the complexities of the approval process which involved the Colorado River Authority (included in this permit was the possibility of evacuation over the river), the Town of Avon, the State of Colorado Highway Department and the Avon Recreation District (for crossing the bike path). Pulling the rope required extensive technical and organizational planning as all traffic routes (including the river) had

to be closed for periods of time during the operation.

The client was East West Partners, one of America's largest real estate development corporations. (A major goal of the gondola project was to enhance real estate sales and to accommodate the Westin Riverfront Hotel). The lift is operated by Beaver Creek Resort, part of Vail Resorts, Inc.

New children's lift

The Haymeadow Lift (Doppelmayr, built in 1980) was Beaver Creek's first chair lift. This fixed double has now been replaced by the 8-MGD "Buckaroo Express". This installation is



primarily used by the Beaver Creek Ski School.

Fitting the bottom terminal into a very tight spot next to the underground parking garage of the Hyatt Hotel posed a technical challenge. The solution was to use the shortest terminal with reduced line speed.

George Hudspeth, Director of Lift Maintenance, has worked with Doppelmayr and Doppelmayr CTEC since 1985. He is responsible for lift procurement and for ensuring that all lifts are "as close to 100 percent safe and reliable as you can make them". He has every confidence in Doppelmayr technology: 15 of the 16 major lifts at Beaver Creek are from Doppelmayr or Doppelmayr CTEC.



The Riverfront Express is used purely for transportation as it is not possible to ski to the lower terminal.

Cable Liner Shuttle in Doha, Qatar

DCC Doppelmayr Cable Car has been awarded a contract to install a Cable Liner Shuttle by the construction company responsible for the New Doha International Airport (NDIA).

The twin-track Cable Liner Shuttle with a length of 500 m and a travel speed of 12.5 m/s is to link the terminal building with the gates. The system consists of two trains comprised of five carriages and can carry 6,000 passengers an hour in each direction.

The decisive factors in awarding the contract to DCC were the short completion time, the minimal impact of the system on the building structure, the perfect implementation of special requirements in terms of function and design, and not least the low maintenance costs.

Start-up in 2009

Start-up is planned to coincide with the opening of the airport in 2009. The NDIA will rank as one of the biggest airports in the Middle East and is expected to handle 50 million passengers a year by 2015.



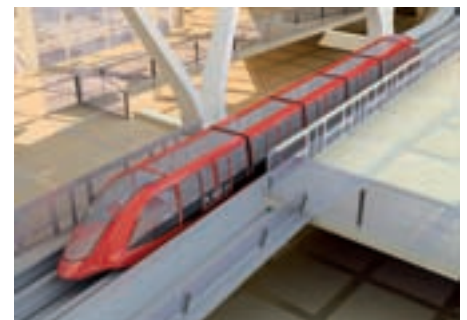
The Buckaroo Express is used primarily by the ski school. The new gondola lift provides a safe and comfortable means of transport for children as well as speeding up the journey.

8-MGD Riverfront gondola

Transport capacity	1,200 PPH
Trip time	2.5 min
Speed	4.1 m/s
Cabins	18
Interval	24 s
Inclined length	632 m
Vertical rise	19 m
Towers	9
Drive 186 kW	Top
Tension	Bottom

8-MGD Buckaroo Express

Transport capacity	1,665 PPH
Trip time	3.8 min
Speed	3.0 m/s
Cabins	26
Interval	17.3 s
Inclined length	522 m
Vertical rise	102 m
Towers	10
Drive 186 kW	Top
Tension	Bottom



Phase 1 of the NDIA opening in 2009: 12m passengers and 750,000t freight per annum. From 2015: 50m passengers and 2mt of freight.

Gondola lift for the State Fair of Texas

The Texas Skyway is an 8-MGD at the historic Big Tex Fair Park in Dallas, Texas, USA. It was also the greatest attraction at this year's popular event.



For Rusty Fitzgerald, Director of Operations at State Fair of Texas, Inc., the gondola lift meets the most important criteria as a means of transport for the Fair Park: safety, reliability and high hourly capacity.



The State Fair of Texas takes place every year, starting on the last Friday in September, and runs through the next three weeks including the last weekend. As Rusty Fitzgerald, Director of Operations/Special Projects, explains, the mission of the State Fair of Texas is to "produce an annual event, recognized within the community and throughout the state for its quality programming, price accessibility and secure environment". The organizers selected "The Sky's the Limit" as the theme for the 2007 exhibition and included the new gondola lift in the art work. The Fair hosted three million visitors; a quarter of a million visitors took advantage of the Texas Skyway.

Skyway gondolas feature special panoramic design

This lift is remarkable in many respects. The gondolas themselves are specially designed for sightseeing and have already been used at the International Gardening & Horticulture Exhibition (IGA) in Rostock (2003) and the National Garden Festival (BUGA) in Munich (2005). These carriers have full length windows and the passengers sit back-to-back on a central bench seat looking outwards to enjoy the views.

Availability, safety, high capacity

The ropeway required approvals from the City Building Department and the State



of Texas Historical Society as well as inspection by the amusement inspectors at the Fair. For Rusty Fitzgerald, the major considerations in selecting the gondola lift were "safety, reliability and high transport capacity".

The installation also posed a number of technical and organizational challenges. One access terminal is located directly above a major entrance to the park which is used by thousands of visitors on a daily basis. The gondola loading platform was raised approximately 12'. This allows visitors accessing the park through this entrance to pass directly under the gondola loading platform. Ramps to this terminal run up either side of the terminal and are built with a slope of approximately 6°. This configuration allows passengers to access and exit the terminal with ease while not interfering with the guests entering the park.

8-MGD Texas SkyWay

Transport capacity	2,400 PPH
Trip time	3.8 min
Speed	2.5 m/s
Cabins	35
Interval	12 s
Inclined length	522 m
Vertical rise	1 m
Towers	8
Drive	Top
Tension	Bottom



High flying fun at the State Fair of Texas with the Texas Skyway: Fairgoers were delighted with the new ride. The route is located in the center of the Fair Park and passes directly in front of the Cotton Bowl Stadium (visible at the right in the background).

The question of tower location

Tower location was another challenge and towers were placed so as not to impact other rides and the Midway games. The fact that the fairgrounds are over 100 years old meant that many unknown utilities were encountered while digging the foundations. Doppelmayr CTEC was responsible for supplying the ropeway equipment while the Fair provided the ramps, platforms and parking buildings for the gondolas.



The RopeCon material transport system combines the advantages of proven ropeway technology with those of conventional conveyor systems

RopeCon® for Jamaica

**In September 2007,
Doppelmayr Transport
Technology GmbH
handed over the biggest
RopeCon installation ever
built to Jamalco/Alcoa.**

The RopeCon in Jamaica transports around 1200 metric tons of bauxite an hour over a distance of 3.4 km and a vertical descent of 470 m.

**Low environmental impact,
cost-effective operation and
maintenance**

RopeCon® meets requirements such as minimum dust and noise levels, low operating and maintenance costs, and enhanced safety. This conveyor system is designed for covering long distances

and essentially consists of a flat belt with corrugated side walls and integrated wheel sets which run on fixed track ropes supported by towers. As virtually all moving parts pass through the stations at regular intervals, this enables maintenance to be performed there. Once the material carried is discharged, the belt is turned over again so that the soiled side faces upwards and no remaining material can fall off.

The system has succeeded in saving 1,200 truck journeys a day. In addition, the topographical situation on Mount Olyphant means that the installation itself generates around 1,300 kW of braking energy per hour which is fed back into the power network.

The installation was performed by Doppelmayr Transport Technology; Jamalco/Alcoa was responsible for surveying the line and all civil engineering works.



Input attracts interest at IAAPA

Input Projektentwicklungs GmbH, a company belonging to the Doppelmayr Group, had an eye-catching stand at IAAPA 2007 in Orlando, Florida, USA, the world's biggest entertainment and amusement trade fair.

The focal point of interest for the trade visitors was the Mountain Glider. With this system, four seated passengers "fly" downhill at speeds of up to 75 km/h. The carrier is propelled solely by the force of gravity and runs along a track mounted on a rope – not only an innovation for amusement parks but also an added attraction for mountain resorts.

The photo shows MD Helmut Müller, Hannes Triebnik and Ewald Koppler from Input at the exhibition stand.

The Sanhe location raises the profile of Doppelmayr China

Since October, the Sanhe plant, in Hebei Province near Beijing, has been available to Doppelmayr customers both as a central point of contact and a production and service center. 24 people are now employed at Sanhe. Up to now, the

plant has housed the manufacturing facilities for steel structures as well as a well-stocked spare parts warehouse. "We are aiming for maximum customer proximity, both geographically and in terms of our services," underlines Yanqiu Li, Managing Director of Doppelmayr China since April 2007. Under the longstanding management of Ernst Nigg, Doppelmayr China developed into a highly effective



and efficient enterprise. After a 45-year career at Doppelmayr, with 25 years dedicated to working in China, Ernst Nigg is now retiring.



Awesome ride experience with the Orange Bubble

The first of the new Orange Bubbles from Doppelmayr are now in service – and skiers are both amazed and delighted: "These bubbles create a sensational ride experience. First, you get the impression that the sun is shining whatever the weather, and second you get outstandingly clear vision. A sharp and friendly view of the world!"