

APRIL
2019

A CONNECTION WE SHARE

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The Pioneering SPIRIT

TELEMIX® AMERICAN EAGLE
A first at Copper Mountain



EDITORIAL

Today, mountains are year-round experiences: stakeholders are creating new ways to attract tourists and build the economy to remain alive and strong, throughout the year. Of course, resorts are offering new sport, entertainment, culture, and gastronomic activities. But attracting tourists isn't enough: mountain stakeholders are reorganising to **ensure the durability of its lifestyle and employment opportunities.**

Throughout the year, **we work alongside mountain sector players** to equip resorts, renovate existing installations, and provide efficient technical assistance. Our services and our design are currently evolving; for all the infrastructures that choose them, this is a great way of getting their image across.

Our technology is evolving as well: here at POMA **we are proud to take part in the great transformation of our territory.** Our smooth transport solutions support the ecological, energetic and digital transitions that are putting energy into the valleys and summits, connect them without polluting to **create the prospect of sustainable development.** Our "particle free" transport systems are used increasingly in cities and now, for the first time, a famous animal park. Families visiting the park are very excited! In the plains and on the summits alike, human relations really propel our projects. **We are inspired by the connections we create with our clients in co-building their equipment.**

Enjoy your reading and have a lovely summer!

Jean Souchal, POMA Chairman of the Board

IN OTHER WORDS

POMA, responsible and united

To strengthen its acts as a responsible company, with the women and men who make us who we are, POMA created a Foundation which will be up and running at the end of spring 2019. This Foundation will support community operations around mobility. The idea is to go further by creating connections in several domains—environment, solidarity, disability and sport—in France and around the world.

► Pioneer of the conquest of the West, American Eagle is the first Telemix® installed by the group in the US!

It is also one of the three systems equipped with the **DirectDrive technology** installed in the country in 2018. With its virtuous, silent and low-energy motor, American Eagle is offering a technological leap to Copper Mountain operators, a very popular resort in Colorado, at **3,753 m of altitude.**

► The line moves at a speed of **5 m/s** and transports **3,200 people/hour**, that's 33% more than the previous equipment. **6-seater chairs** and **8-passenger Diamond® cabins** take passengers for a journey of unprecedented comfort up to the gently sloping pistes or for a relaxing time in a high-altitude restaurant.



VAL D'ISÈRE

sky view

A SUCCESSFUL FIRST SEASON FOR LA DAILLE'S GONDOLA LIFT

In 1966, the very first POMA detachable grip gondola lift opened a new world of potential for La Daille. 52 years later, the slope is being equipped with a state-of-the-art lift that will make the sector more attractive. The results have met their highest expectations.

Winter 2018: with stunning views as it floats over the mythical Oreiller-Killy piste, the quality of this lift has really taken off! **€11M were invested** to replace the previous gondola lift with a high-quality installation. The result: **2,800 people/h** get on board the Symphony cabins, designed by Pininfarina. Sliding doors, plenty of space inside, heated seats, Wi-Fi, a stunning view of snow-capped summits...The trip is now pure pleasure! "We are developing the area by enhancing it," notes **Olivier Simonin**, General Director at the Val d'Isère Télépherique company. "The visual impact of the towers and lines is kept to a minimum and noise disturbance is avoided by moving the machinery."

In **4m30s** (instead of 9), the **53 ten-passenger cabins** and the



4-seater VIP cabin climb up to an altitude of **2,294 m** to reach the mountain restaurant, to ski down a slope through the wind sheltered woods or just to enjoy all the fun to be had in the Tignes ski area. Safe, even in extreme weather, this lift makes resort activities viable all year round. Its first season was better than anyone expected: **it increased passenger flow in the area by 36%**!

TOUCH OF DESIGN

SYMPHONY an exclusive signature

Designed by Pininfarina, a design firm famed for their collaborations with Ferrari, the Symphony cabin displays its refined lines. Its assertive design gives priority to transparency. Passengers can enjoy a **panoramic view** while seated on **heated leather seats**. The **premium options** and the modular layout bring an extra touch of comfort.



IN YOUR WORDS

"La Daille gondola lift's look and comfort are so well appreciated that even pedestrians make use of it to reach the mountain restaurant! This gondola lift's impressive stability during wind makes our journey a lot more comfortable and allows us to organize events for La Folie Douce in full tranquillity, whatever the weather. This strategic gondola lift for Val d'Isère boosts the attraction of La Daille village and is already inspiring us with new projects."

Olivier Simonin,
General Director at the Val d'Isère Télépherique company (STVI)



ZOO PARC
de
BEAUVAL
HÔTELS BEAUVAL

“Le Nuage de Beauval” flies over the biggest zoo in France

► TRAVEL THROUGH THE ANIMAL WORLD IN A GLASS FLOOR CABIN

The Director of Beauval's ZooParc, Rodolphe Delord, knows the gondola lifts in the Sydney, Lisbon and Chimelong (China) zoos well, but his Beauval project really came together in La Clusaz. “Le Nuage de Beauval”, a unique installation for France offering a spectacular journey around the famous animal park, was co-built with help from POMA teams. Connecting two far away sections of the 98-acre ZooParc, “Le Nuage” easily transports visitors **45 meters above ground**. Its **24 spacious 8-seater cabins** have been designed with families, groups and enthusiasts in mind, with special consideration for people with reduced mobility. Since March 30, herds of visitors have been flocking to the site to enjoy the views from the **panoramic**

POMA collaborated with the Beauval team to design and produce this ground-breaking equipment. Support services that will continue for 5 years.

windows and glass floor during the short “flight” between the elephant and lion areas. “This gondola lift is the first to be installed on private land in France. Here, we're in a valley, in a spacious park; the gondola lift is going to provide a unique experience” highlights R. Delord.

An ecologically responsible project
The gondola lift, designed with help from the POMA team, is truly discreet: it takes up very little ground-space, has a low noise impact (due to a DirectDrive motor), and blends in well with its surroundings. The animals can enjoy their peace and quiet in the park which receives 1.5 million annual visitors.

A successful skill transfer
Two operators with experience in Alpine resorts (one of which worked at La Clusaz) were hired to operate

the gondola lift, so that the team working on “Le Nuage” could quickly take shape. After the co-design and production stages, POMA trained Beauval's team—managers, operators, technicians—in installation operation and maintenance using the UPilot® training solution. For 5 years POMA will ensure the availability and safety of the equipment thanks to, amongst other things, the installation of a remote monitoring system.

“A strong friendship has been established between La Clusaz and Beauval Zoo. We are passionate, professional, innovative people... concludes Hubert Pollet-Villard (Operations Director at La Clusaz). We welcome Beauval to the world of ropeways. It's a pleasure to have worked together and to have shared our expertise.”



Le Semnoz is daring TÉLÉMIX®

Ideal for skiers of all abilities throughout winter and in summer for mountain bikers and hikers, Télémix® is a hybrid installation adapted for all resorts.

Le Semnoz is replacing their Belvédère FGC4 with a single rope Télémix® to provide all year round service. This installation reduces travel time, increases its transport capacity and welcomes everyone by bringing together the separate advantages of both cabins and chairs. Families, ski schools, people with reduced mobility, mountain bikers and skiers will all have access to the slopes!

**Less
waiting time**
Separate boarding and
unloading areas



Mixed options
6-seater chairs
and 10-passenger cabins



All-year-round solution
Innovative ideas
for summer and winter tourism



Flexible configuration
Transport that's adapted
to the operator's needs



Optimal safety
Ideal for beginners and ski schools



PAVING NEW ROADS to another mountain economy

La Montagne, ça vous gagne! In the 90s a catchy advertising slogan emerged marking a turning point for the French tourism industry, it was heavily communicated and led to a widespread public image for the mountain sector in France. If the French public's love for visiting the mountains has proved its endurance, today "new challenges are making us rethink mountain tourism entirely", as the first mountain tourism strategic committee reminded us last February. Sector stakeholders are finding new initiatives one after the other.

Summer tourism in the mountains is already hot

If, several years ago, the mountain tourism industry suffered during the summer season, today it's a completely different story. Sure, the mountains come to mind as soon as the first snowflake has fallen. Everyone agrees that with just under 70,000 acres of ski slopes, the French mountains are a great playground for skiers of all ages and abilities. Resorts have also kept ahead of the trends, wants and needs of today's world by developing various entertainment offers for when the ski season is over, including snow-shoe hiking, sledding, sled dogs, well-being activities, etc. That's not to mention the kid-friendly infrastructure, such as the one in Les Menuires!

Alongside this, resorts are becoming a fresh, tempting alternative to summer beach holidays. There is an activity for everyone to enjoy in the beautiful sur-

roundings and well-appreciated fresh air, whether it's an athletic, cultural, or gourmet experience. In 2018, the peace and quiet of the mountains drew 28% of the French public searching to get a breath of fresh air and disconnect from their daily lives.

The tourism of the future is no longer seasonal

Today resorts are facing the same challenges: developing the economic sector for urban planning, making the most of their expertise and preserving lifestyle and employment opportunities. Everyone is working together to attract tourists to the mountains throughout the year, and, with this in mind, to design an "ideal city-break" as an enticing offer. Throughout the six mountain ranges that France has to offer, there is a trend emerging; people want to enjoy a new kind of mountain, different from the picture-postcard stereotype.

They are looking for an experience that is live, wild, invigorating and inspiring. We need to remove this boring, diminutive image that we have of static, dual season mountains. We must shape the tourism around the territory.

Chamrousse resort is implementing a project based on the very change of the classic ski resort model into new ethical models, with a focus on the issues of ecological, energetic and digital transitions. As part of the Chamrousse 2030 Project, the first resort in the Belledonne Mountains wants to establish a perennial, four-season tourism with new ideas in terms of destination, proximity, leisure and also business.

Are those who live in the mountains proud of their territory? They have a lot of pride and they want to show it, meanwhile ecological issues are putting their homes and land under the spotlight.

Sources: ANMSM, ADEME, Mountain Riders, Ipsos, Domaines Skiabiles de France, diplomatie.gouv.fr, Opinion Way

Numbers IN BRIEF

23% of French territory covered by mountains

1st European ski area

57% GHG emissions due to tourist cars in the mountains

10 million visitors per winter in resorts

45% of the French who visited the mountains in summer plan to return



Share to protect

"Sustainable tourism" is a term that's been used heavily in recent approaches to tourism development. However using ropeway transport means a new solid and secure alternative to travelling by roads. It is particularly useful when it comes to travelling over big altitude differences and natural obstacles without polluting the atmosphere. For the problem of mountain pollution, caused mainly by travelling by roads to reach and travel between and within resorts, this is a conceivable a solution. The new Le Praz gondola lift, currently in construction, will connect the village—where a 500-place parking lot has just been built—to the center of the Courchevel resort. At Alpe d'Huez, the Alpe Express already provides a connection between the resort's center and the foot of the slopes, and to the village of Huez starting from the next ski season. Gondola lifts are a parti-

cle-free means of transportation and replace traffic previously operated by the numerous shuttle buses.

Implementing the projects for the territory

In the mountains, environmental needs are synonymous with the global eco-social approach which increases the quality of life for those who live in the mountains all year round, thus making the lives of workers, school children and retirees a lot easier. The issue of opening up areas that have been closed off is essential to annihilate the notion of a "two-speed territory", a duality that occurs between a winter sports resort and its supporting territory, the valley. Due to this, the village of Bourg-Saint-Maurice invested in renovating its symbolic funicular railway which offers a seven-minute connection between Les Arcs and the rail network. A new gondola lift is currently being built in the Pyrenees to

connect the village of Loudenvielle to the Peyragudes ski resort. From 2021, it will only take 18 minutes in a gondola lift for locals and tourists to travel between Alpe d'Huez and Les 2 Alpes. Mountain territories must face specific challenges. Even though there is still a lot to be done to bring about the vision of four-season mountain tourism, French resorts have already started taking action. A pioneer that's paving the way for others to follow? This is the impression you get from the Gudauri ski resort in Georgia for example, where they have installed new gondola lifts that both skiers and inhabitants of the valley benefit from. They no longer worry about the arduous weather conditions that used to make access to Kobi so difficult. In the Guizhou province of China, a valley lift now connects the old mining town of Lianshi and the Meihuashan International Ski Resort, allowing 1,500 p/h to be transported throughout the year.



FOR LONG-LASTING OPERATIONS

► POMA SUPPORT EXTENDS THE LIFE OF INSTALLATIONS AND GUARANTEES THEIR SAFETY

Operators use POMA teams to install new equipment, but also to manage the entire life cycle of their installations.

POMA experts dedicated to installation renovations work closely with customers. This proximity is the key to the success of this historic POMA service. **The equipment monitoring process ensures that the machines comply with safety standards and improves the performance and comfort of the installations.** The transformations undertaken are adapted to the age and condition of the equipment and, before starting up the renovated installations, operators are provided with an adaptation period to make operations easier.

For operators, an efficient renovation—changing necessary parts only, custom replacement if the standard has changed, maximum reuse of existing parts—has many advantages. **The method reduces maintenance budgets and administrative procedures.** It increases the availability and initial value of installations that are well-used, well-recognized, and well-sized—machinery, cabins, towers and/or stations—while giving them a “just-like-new” look that users appreciate. It thus modernizes the image of each area.

► MONTFRAIS GONDOLA LIFT - VAUJANY

71 SP77 cabins replaced by 75 six-seater Diamond® cabins.

Advantages for passengers: panoramic windows, level boarding, wide door opening, inside ski racks, mountain bike carrier.

Advantages for operators: maintenance optimized by the latest generation of lighter grips and hangers.

► MONT VALLON GONDOLA LIFT - MÉRIBEL

In 1987, Mont Vallon was the first gondola lift to travel at 6 m/s in France. It was completely renovated: carriers, stations, electrical control system.

Advantages for passengers: panoramic cabins, eight comfortable seats.

Advantages for operators: transport capacity of 3,035 people/h uphill and 750 people/h downhill, made possible by motorizing the tracks.

► BRUYÈRES GONDOLA LIFT LES MÉNUIRES

Operator specifications: increase speed, improve traffic flow, improve comfort while keeping the existing structure.

POMA's solution: extension of the platforms and slower passage of carriers to facilitate boarding, 12-passenger standing cabins replaced by 8-seater Diamond® cabins, transport capacity of 2,500 people/h upheld thanks to an increase in the speed of the gondola lift.

Advantages for agents: reconstruction of operations buildings.

POMA ASSISTANCE ROLLS OUT its expertise

► ONLINE OR ON SITE, TECHNICAL ASSISTANCE EXPERTS MEET THE NEEDS OF EACH SECTOR

The sustained use of POMA installations requires a high-quality maintenance service. Don't worry, POMA's technical assistance is available year round!

In the city for a smooth commute or in the mountains for year-round tourism, **ensuring an installation's permanent availability is a crucial issue for operators.** In the mountains, the equipment must operate over increasingly long periods of time to diversify tourist offers and attract sports enthusiasts to new and evermore popular leisure activities.

Aware of these new requirements, POMA will soon mobilize its hotline, open 7 days a week from 8am to 5pm. Two to three people are available to answer customer calls and seven people with various speciality skills are available to diagnose damage and manage repairs of all kinds.

This qualified team identifies each problem with the client, to define the appropriate solution together. When necessary, Group experts—in gearboxes, hydraulics, electricity—or specialists from the POMA partner network go on site.

Seven days a week, they indicate what procedures to follow, how to repair systems and avoid downtime. The information flows managed and centralized in a common

global database help in organizing dedicated local teams so that, in France and all over the world, **POMA customers benefit locally from a rapid intervention service.** Dedicated teams are available and ready to react fast, ensuring thousands of hours of technical assistance, in the snowy mountains or in the urban jungle. Through this high-value service, the teams have forged unrivalled expertise.



The service in
A NUTSHELL

Hotline
Service
**7 DAYS
A WEEK**

**Year-round
on-site
INTERVENTIONS**

A team of
skilled
experts
available

POMA

ROLLER BATTERIES

➤ **LESS VIBRATION FOR AN EVEN MORE PLEASANT ROPEWAY JOURNEY**

The accelerated evolution in the range of roller batteries installed on the Medellín Metrocable lines is now benefiting all installations!

At the end of 2017, POMA Colombia asked the POMA Voreppe Design Office to replace the roller batteries on the Medellín metro at the same time the POMA Design Office was thinking about how to optimize this subsystem.

The teams in Voreppe—supply chain, DO, workshops—and POMA Colombia then worked together to develop the necessary parts over a very short period of time. Thanks to opera-

tor feedback, this collaboration has brought about a major change in the range of roller batteries.

Maintenance costs are reduced, intervals are adapted and inspections are simplified: no need to dismantle the entire roller battery, only the verification of a few parts is needed. The new series is equipped with latest generation technologies developed by our most innovative partners.

In parallel, the use of a silent rope that manages the space between strands, which can cause contact forces between the wires, increases the lifespan of the rope and therefore reduces maintenance requirements.

Passenger comfort is also improved by **reducing vibrations and noise** from the roller batteries.

Several patents have been filed on the design of these roller batteries.

The research and development process is accelerated, and test-bench operations—including regulatory inspections for certification—are carried out in Voreppe. The complete assembly of the roller batteries is carried out in the French workshops to shorten intervention time on the Medellín line and minimise downtime in order to maintain gondola lift service.

A high-quality installation

At the end of 2017, Colombian operators successfully assembled the two tower heads in less than 24 hours—without cranes or helicopters, which are prohibited in this residential area. A cylinder tool was specially designed

for this operation. It was also a success thanks to the important anticipation—clearing procedures and training teams—and logistics ensured by POMA Colombia.

In 2018, the renovation of the Metrocable's K line was completed by the replacement of 12 roller batteries. In 2019, Medellín has renewed its trust in POMA by ordering another 10 roller batteries.

Improvements integrated into new installations

The silent rope selected in 2017 for Medellín was installed on the Alpe d'Huez ropeway in 2018 and will be integrated this year on another French gondola lift.

MAJOR FIRST

A NEW WIND is blowing

Three of the group's innovations boosted the season of pioneering alpine resorts.

Val d'Isère: the Symphony gondola lift increases La Daille's traffic by a factor of three.

Méribel: the Premium high-speed chairlift with heated seats is much-appreciated by users.

Courchevel: innovative design for the **Les Grangettes EVO gondola lift**, embellished by its LED lighting. For operators, the **SmartBoard** has made a remarkable entry, in **Châtel as well as in Les Diablerets** (Switzerland).

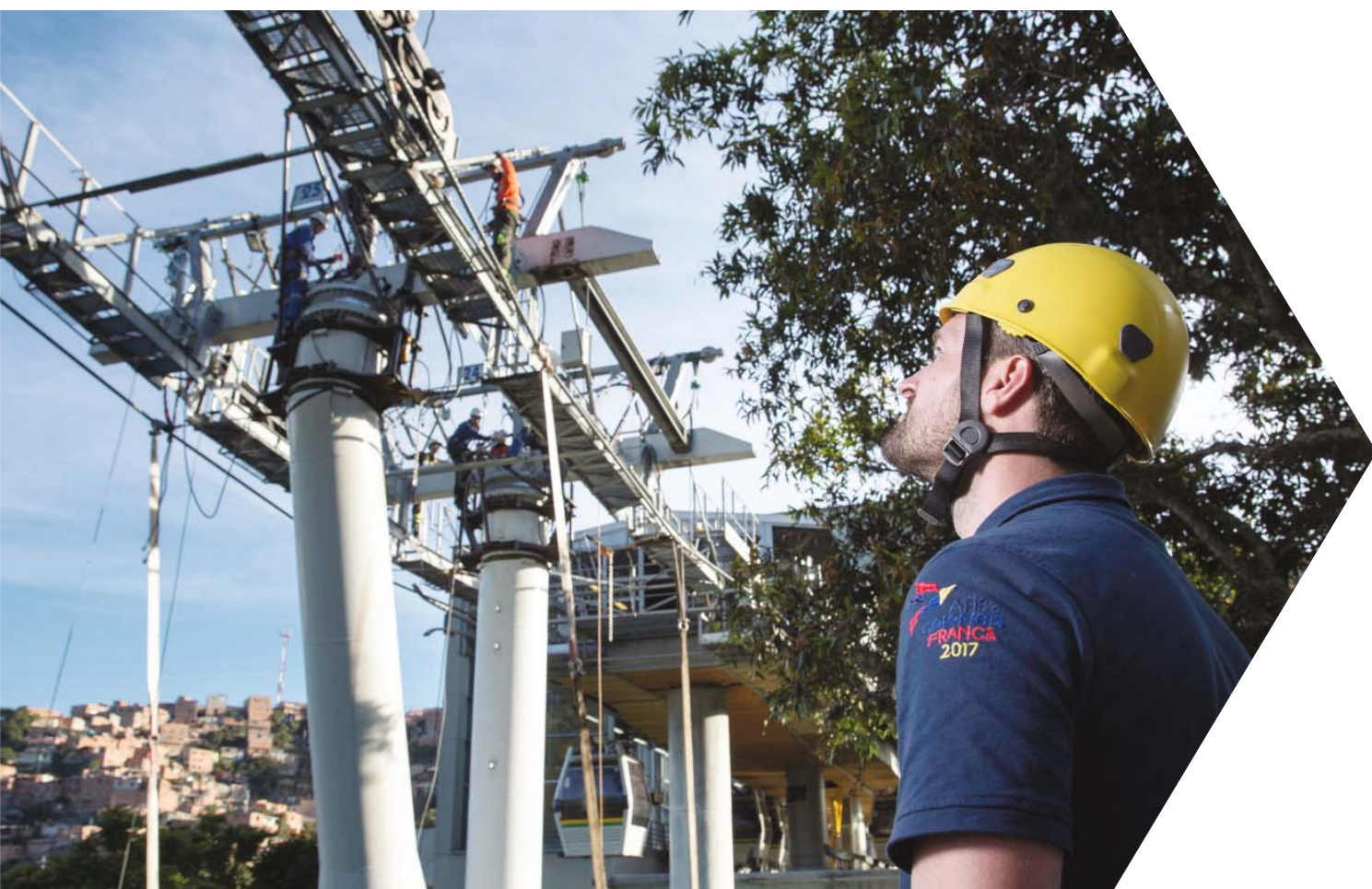
INSIDE POMA



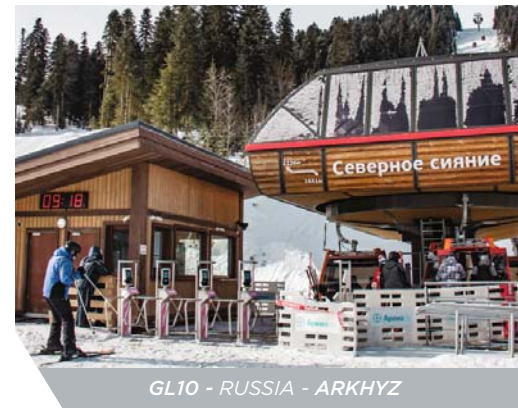
POMA Beijing official supplier of the 2022 Olympic Winter Games

The IOC has made its decision: POMA Beijing has won the contract to prepare the pistes for the 2022 Winter Olympic Games alongside Prinoth, one of the group's brands. The complete range of equipment for mountain development and the local service rolled out since 2007 have made the difference.

POMA's Chinese subsidiary will supply 53 Husky, Bison and Leitwolf grooming machines, 30 of which will be leased. Prinoth thus offers the Olympic Committee great flexibility in the preparation of pistes for all ski disciplines. Like the Demacenco snow-making machines, the snow grooming machines developed by the group are high-performance snow equipment that complete its integrated service offer. POMA Beijing is managing the entire project with turnkey service. The customer is supported in a range of areas from financing to the maintenance of the ropeway and snow-making/treatment equipment. A unique offer on the market that convinced the Olympic committee!



FOCUS ON the season's achievements

GL8 - FRANCE - LES MENUIRES
BRUYERESGL10 - FRANCE - COURCHEVEL
GRANGETTES

GL10 - RUSSIA - ARKHYZ



GL8 - FRANCE - MÉRIBEL - MONT VALLON



GL10 - FRANCE - VAL D'ISÈRE - LA DAILLE



GL10 - GEORGIA - GUDAURI

DGL10 - FRANCE - ALPE D'HUEZ
ALPE EXPRESS

GL10 - SWITZERLAND - LES DIABLERETS - DIABLERETS EXPRESS

TMX6/10 - FRANCE - LE SEMNOZ
BELVEDÈRE

DCL6 - FRANCE - CHÂTEL - PIERRE LONGUE



DCL6 - FRANCE - LA PLAGNE - INVERSENS

DCL6 - FRANCE - LE FOUX D'ALLOS
MARIN PASCALDCL6 - FRANCE - SERRE CHEVALIER
CÔTE CHEVALIER

DCL6 - FRANCE - VALMOREL - LE MOTTET

DCL6C - FRANCE - MÉRIBEL
LEGENDS

POMA AND SKIING Together we are stronger

Between POMA and the French Ski Federation, a beautiful story is being written, based on the same values and driven by a love of the mountains. The promising partnership between the two entities opens up new opportunities for the Federation's young skiers.

POMA and the French Ski Federation share the same values of breathing life into their territory: endurance, excelling beyond the limits, respect for mankind and the environment. In the 1930s, ski lifts were born with the advent of skiing in France, and it is therefore quite naturally that POMA supports the practice and its development at all levels and for all. On December 21, during the Women's World Cup in Courchevel, the company became an Official Partner of the French Junior/Youth Alpine Ski Team and will accompany the French rising talents until the 2022 Beijing Olympic Games.



From left to right: Thierry Schoenauer, President of the Comité de Ski de Savoie; Éric Brèche, ESF President; Fabien Saguez, DTN FFS; Michel Vion, FFS President; Jean Souchal, POMA Chairman of the Board; Fabien Felli, POMA Vice-Chairman of the Board; Christian Laval, POMA Marketing Director; Pascal de Thiersant, President of Société des 3 Vallées; Franck Lombard, first Vice-President of the Conseil départemental de la Savoie; Jean-Marc Silva, General Manager of France-Montagnes; Pierre Ract, POMA Sales Manager for French Ski Areas

A very good season for our rising talents

In February, Florian Lorient won the bronze medal in Super-G for his first participation at the Alpine Junior World Ski Championships in Val di Fassa (Italy). The mixed team including Marie L., Doriane E., Jérémie L. and Augustin B. won gold in the "Team Event", a new Olympic giant slalom event. POMA would like to congratulate all the French Hopefuls for this great sporting season!



POMA'S WORLD



MAY 8, 2019

Skadii, digital solution for ski area management

Accessible from any digital device, this platform will be sold by HTI Digital starting on May 8 and will be available for demonstration on appointment at the InterAlpin exhibition.



100,000 H OF OPERATION

World première in Medellín

In 2004 the K line of the Colombian Metrocable integrated a gondola lift into a public transport network for the first time. After 100,000 operating hours, it proves the value of the model for mobility on a global level.

skadii MOUNTAIN MANAGEMENT TECHNOLOGY



SPRING 2019

First 3xtri-cable detachable aerial tramways in China

Work on the tri-cable interconnected by 3 stations, forming a triangle, continues in Zhuhai. The first 34-passenger Symphony cabins were shipped from SIGMA's French workshops.

OCTOBER 1 - 3, 2019

Public transport exhibition

The 27th National Public Transport Meetings will be held in Nantes from October 1 - 3. A major event for mobility stakeholders where POMA will of course be present.



19 TRAINS

2019, the year of the funicular railway

This year, 19 funicular trains will be produced in our SIGMA workshops. The remarkable growth of this activity (for new or renovated systems) is made possible by our flexible organization.

27^e Rencontres nationales du transport public

Nantes 1^{er} au 3 octobre 2019

77,000 PEOPLE

Exceptional attendance for Chinese New Year

During the New Year celebrations, 77,000 people used the Safari Park gondola lift in Chimelong, China. A record for this recreational gondola lift.



99.8% AVAILABILITY RATE

Success of the first gondola lift in Santo Domingo

The 5-km long, gradient-free line installed in the Dominican Republic is drawing crowds; it has carried more than 3.5 million passengers over the last nine months, with a record availability rate.



POMALINK POMA'S NEWSLETTER

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