

We
move
people

REPORT

2018

COMPANIES OF HIGH TECHNOLOGY INDUSTRIES

LEITNER
ropeways

POMA

 agudio

Pionti

 **DEMACKENKO**

 **LEITWIND**

Those who
move people
drive forward.

With groundbreaking technologies, innovative design and sustainable solutions, we move people around the world – a synergy which continuously drives our group forward.



Facing the future together: High Technology Industries



Cable-hauled passenger transport systems for use in mountains and cities

Page 8 – 9



Cable-hauled passenger transport systems for use in mountains and cities

Page 22 – 23



Material transport systems

Page 36 – 37



Snow groomers and tracked utility vehicles for all kinds of slopes and terrain

Page 40 – 41



Lances, propeller canons and all-in-one solutions for technical snow-making

Page 50 – 51



Megawatt-class gearless wind turbines

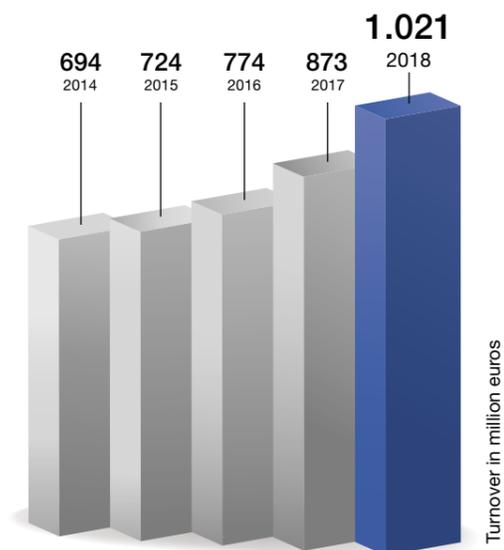
Page 56 – 57

Innovation drives us forward

Turnover

We were able to increase consolidated sales to 1.02 billion euros in 2018.

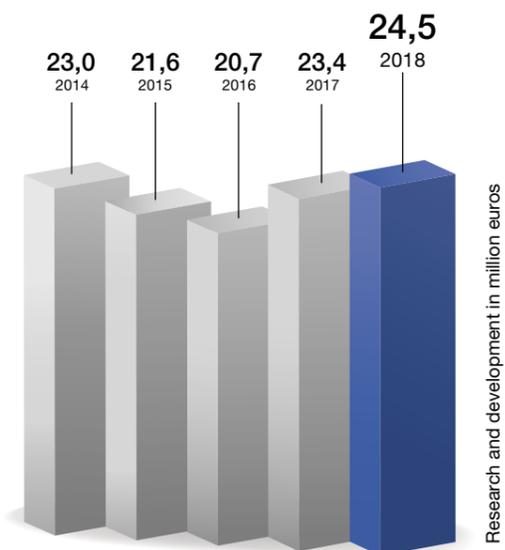
- 93 ropeways
- 11 wind turbines
- 852 snow groomers and tracked vehicles
- 2,000 snowmakers



Research

Technological advancement is the recipe for success in our group of companies. This is why we invested an impressive 24.5 million euros in R&D in 2018.

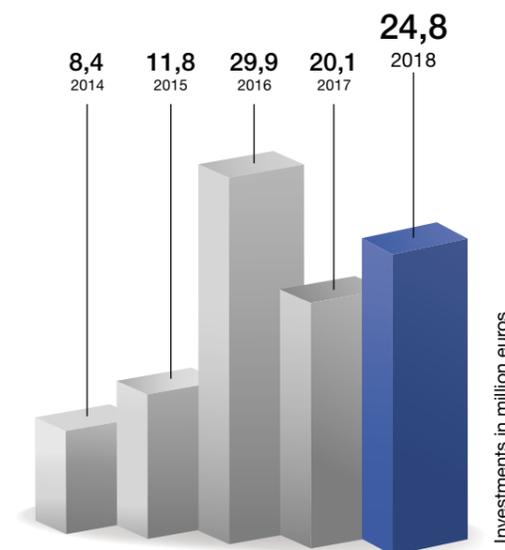
- Ropeway systems: further development of the stations for detachable systems and a range of components along the ropeway line
- Snow grooming and tracked utility vehicles: development work on the Tier 5 snow grooming vehicles
- Snow generators: completion of the new generation of the EVO 3.0 propeller machines and development of the Snowvisual and Demaclenکو Control software
- Wind turbines: completion of the new LTW42 - 250 kW for the small wind-turbines-market



Investments

Our group of companies invested 24.8 million euros in consolidating its position on the global market in 2018, expanding strategic and operative capacities for the long term.

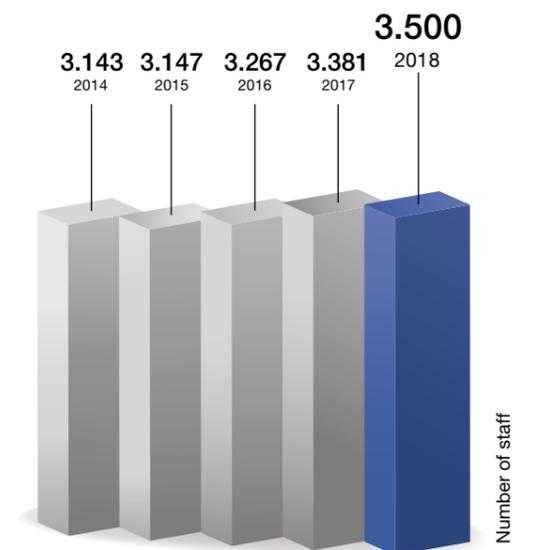
- Expansion of premises at the headquarters in Veyrins-Thuellin /France and purchase of machines for the plant in Gilly-sur-Isère in Savoie/ France
- Purchase of a CNC portal milling machine for processing large components and a welding robot system with two welding robots for the plant in Unterackern in Vipiteno/Italy
- Investment in development works for the new DEMACLENKO company headquarters in Unterackern in Vipiteno/Italy



Employees

Our group of companies employed 3,500 staff worldwide in 2018.

- Around 2.2 million euros in training and further development
- 198 internships



Successful worldwide

LEITNER[®]
ropeways

In 2018, LEITNER ropeways celebrated its 130th company anniversary with a special kind of firework: no fewer than 43 systems in 15 countries were implemented, more than any year prior to that. These systems were fitted out with technological highlights which are unique in the industry. This success is rooted in the growing expertise of the employees across generations. After all, what was learnt in a small workshop for the construction of agricultural machines, saw-mills, water turbines, and material ropeways back in 1888 has not lost its importance nowadays. The high quality of the in-house development, paired with expert production and an appealing design, is still LEITNER ropeways' recipe for success.

In addition to the launch of the world's highest 3S gondola lift at the Klein Matterhorn in Zermatt, LEITNER ropeways was also able to win people over with product innovations last year. Special attention was paid to the new stations and the Symphony 10 cabin, which were developed together with the Italian design company Pininfarina. The combination of high-quality architecture and modern technology is unique and is enticing more and more customers. Since last year, the new LEITNER ropeways stations have been in operation in several ski resorts in Italy, Austria, France, and Sweden. Highest efficiency in operation and attractive design are the latest trends.



SWITZERLAND – ZERMATT

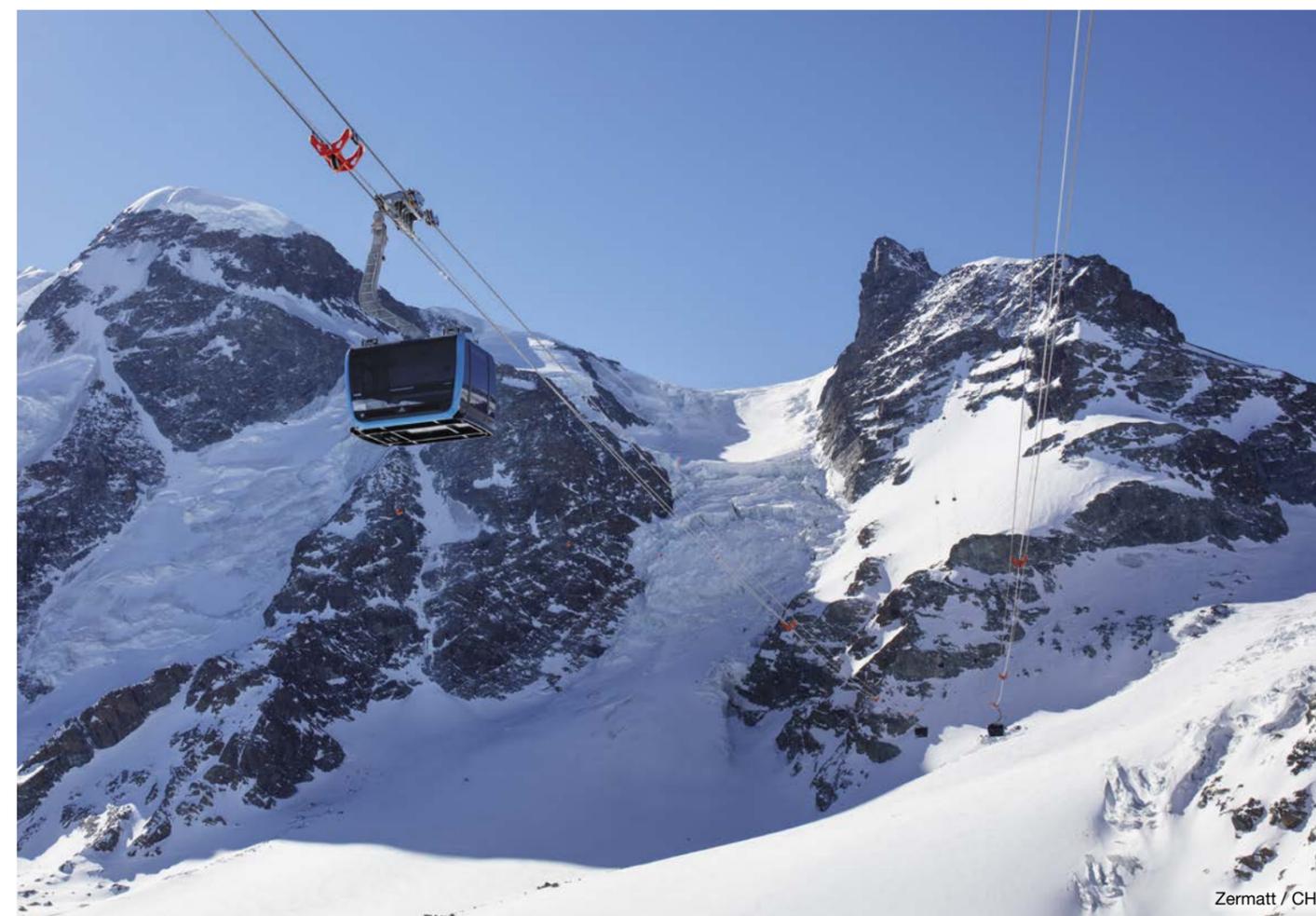
Superior quality

Switzerland is known for having the most attractive ski destinations in the world and a highly developed ropeway landscape. With the opening of the world's highest 3S gondola lift, LEITNER ropeways is setting new standards. The Matterhorn glacier ride takes passengers up to 4,000m above sea level and is a technological masterpiece. During the ride you can enjoy extreme glistening, with some of the cabins in Pininfarina design finished with Swarovski® crystals. Exclusivity, maximum comfort plus state-of-the-art technology – the new ropeway is a highlight in every respect. The ski arena on the magical mountain, one of the largest in the world with 360 kilometers of slopes, can now be reached quickly and easily. The Matterhorn glacier ride also laid the

foundation for the planned Alpine Crossing – the future link between the areas of Zermatt (Switzerland) and Cervinia (Italy), which will be available to pedestrians all year round.

TD28 Matterhorn glacier ride

Inclined length (in total):	_____ 3,765 m
Vertical rise:	_____ 898 m
Transport capacity:	_____ 2,000 p/h
Number of towers:	_____ 3
Number of cabins:	_____ 25



BOSNIA AND HERZEGOVINA – SARAJEVO

The mountain lives

It was one of the most famous symbols of the 1984 Olympic Games: the ropeway to Trebević, the local mountain of Sarajevo. More than a quarter of a century later, life returns to the mountain thanks to state-of-the-art ropeway technology from LEITNER ropeways. Opened on 6 April 2018, the new 10-passenger gondola lift brings tourists and residents directly from the center of the Bosnian capital to Trebević, twice as fast as before. The cabin colors red, black, green, blue, and yellow are reminiscent of the city's Olympic glory days.

GD10 Trebević

Inclined length (in total):	_____ 2,158 m
Vertical rise:	_____ 578 m
Speed:	_____ 5 m/s
Transport capacity:	_____ 1,200 p/h
Number of towers:	_____ 10
Number of cabins:	_____ 33



Obertauern / AT



Kitzbühel / AT



Sarajevo / BA

AUSTRIA – KITZBÜHEL AND OBERTAUERN

Leather, loden, state-of-the-art comfort

A new era of ropeway comfort has begun in Austria. For the modernization of two 30- and 50-year-old systems on the Kitzbüheler Horn, LEITNER ropeways is focusing on a premium feel. The seats on the new Brunelle ropeway spoil passengers with genuine leather covers, seat heating, and weather protection bubbles. The journey to the peak now takes half the previous time. The modern cabins of the Raintal 10-passenger gondola lift represent a new generation of ropeway. Passengers can also arrive at the slopes in Obertauern relaxed and in no time at all with the Plattenkarbahn, a Telemix system with Diamond EVO 10-passenger cabins and premium 8-seater chairs. Its loden and real-leather seat covers exude a feeling of exclusivity.

Modernization with
exclusive
details

State-of-the-art technology meets premium design

ITALY – DRIVE TOWARDS MODERNIZATION

The strong trend towards new gondola lifts in European ski resorts can also be witnessed in Italy. In addition to significant performance improvements relating to safety, comfort and capacity, additional offers in the ski resorts are often included too – a home match for LEITNER ropeways. The impressive number of sixteen newly constructed winter sports facilities between South Tyrol and Belpiano in 2018 is testimony to this trend. On the Passo

Resia, the Belpiano and Malga S. Valentino ski resorts were upgraded for tourists with two new 10-passenger gondola lifts. The new connection created a continuous area, which allows year-round operation for the first time. In the Rio Pusteria ski resort, the new Ski Express gondola lift will appeal not only to pleasure skiers and families but also to experienced winter sports enthusiasts.

Rio Pusteria / IT



Belpiano / IT

Constructions were also once again underway at the home of LEITNER ropeways. At Monte Cavallo near Vipiteno, the new Telemix Panoramabahn system, a combination of 6-seater chairlifts and 8-passenger cabins with maximum flexibility for various different uses in winter and summer, went into operation. A new era dawned in the 3 Zinnen Dolomites ski area. After more than 40 years in operation, the nostalgic two-seater

chairlift has been replaced by a new detachable 6-seater chairlift. Champoluc in Valle d'Aosta received an 8-passenger gondola lift with a dual function: it not only serves the ski resort but is also used as public transport. In addition to the new ropeway with a Pininfarina station on the Alpe di Siusi, further ropeway projects were implemented in Alta Badia in the Dolomites and in San Martino di Castrozza in Trentino.

AUSTRIA – EXPANSION OF WINTER HOTSPOTS

In Salzburg and Tyrol, LEITNER ropeways brought the winter sports hotspots up to date with more capacity, safety, and comfort. The newly opened 10-passenger gondola lift to the Maiskogel in Kaprun takes passengers directly from the winter sports resort to the slopes. Guests can now access the valley station by foot. In the Hochzillertal-Kaltenbach ski resort, the new “Wimbach-express” 10-passenger gondola lift, with its ergonomic design and individually heated seats in the Symphony 10 cabins, ensures maximum transport quality.



Sälen / SE



Hochzillertal – Kaltenbach / AT

GERMANY, SWITZERLAND, FRANCE – A RECORD AND A PREMIERE

In Germany, the modernization of the Jenner mountain in the Berchtesgaden Alps is gaining momentum. The new 10-passenger gondola lifts are already in partial operation and the 6-seater Jennerwiesen chairlift is already in use. In Switzerland, the “Schneehüenerstock-Express” 10-passenger gondola lift in the SkiArena Andermatt-Sedrun was established as an important link between Andermatt and Sedrun. Previously, you could only travel by train with the “Matterhorn Gotthard Bahn” from Sedrun back to Andermatt. However, this same route will now be possible by gondola lift and with skis. The new ropeway is thus the most convenient and fast “return option” from the Oberalp Pass to the Schneehüenerstock. France is also making powerful investments. In the Grands Montets ski resort on Mont Blanc, the French freeride paradise, a chairlift and two surface lifts were opened and the Val Cenis Vanoise ski resort received a 10-passenger gondola lift with Diamond EVO cabins and Pininfarina stations.

SCANDINAVIA – CONTINUOUS MARKET LEADERSHIP

The generation shift is in full swing in Northern Europe. In Hundfjället, a popular ski resort in the country with a beginners’ area, enchanted forest and Sweden’s steepest ski slope, LEITNER ropeways is equipping the new West Express 8-seater chairlift with Pininfarina stations for the first time in Scandinavia. A new 6-seater chairlift will be installed in the family ski area Järvsöbacken, north of Stockholm as well as in Borlänge, in the Romme Alpin ski area. Here, the Götes Express 6-seater chairlift is already the fifth LEITNER ropeways installation. The Norwegian ski resort Hafjell near Lillehammer has also opted for a modern 6-seater chairlift.



Bachledova dolina / SK



Beşikdüzü / TR

Outlook for 2019

NEW ZEALAND – RUAPEHU & CORONET

Volcano ropeway

On the North Island of New Zealand, the “most beautiful part of the world”, LEITNER ropeways is building a 10-passenger gondola lift under extreme conditions on Mount Ruapehu – a still active volcano and sacred mountain of Māori Iwi. Mount Ruapehu is located in Tongariro National Park, a UNESCO World Heritage site. The remoteness of the site and the location are as much a challenge for the construction of the ropeway as the weather conditions. Extensive measures protect the system from ice and wind peak speeds of up to 275 km/h. Another project is being developed in the southern half of the island state near the city of Queenstown: a new Telemix system for year-round operation in the Coronet Peak ski resort.

NORWAY – VOSS

The first 3S gondola lift in Scandinavia

LEITNER ropeways is building the first 3S gondola lift in Scandinavia in the Norwegian tourist destination of Voss, a well-known ski resort between Oslo and Bergen. The system will be in operation from summer 2019 and will transport around 1,500 people per hour to Hangerstoppen with its 13 Symphony cabins in Pininfarina design. The traveling time will be just under 7 minutes and the ropeway will operate all year round. The valley station will be integrated into the newly designed station area including the new bus station. This creates a central transportation hub close to the town center.

POLAND, SLOVAKIA – EXTENSIVE MODERNIZATION

The Polish enthusiasm for winter sports was not without impact on LEITNER ropeways. In the Szczyrk Mountain Resort in the Carpathians, the largest and most popular ski resort in the country, a new 6-seater chairlift has been built as part of an extensive modernization program, which is now the longest ropeway in the Szczyrk Mountain Resort.

In the year-round tourist destination Bachledka Ski & Sun, located near the Slovakian/Polish border, a 30-year old ropeway has been replaced by a new 10-passenger gondola lift. It is the most important means of transport in the area, significantly increases capacity, and will also be used in summer for hikers, families, or cyclists.

BULGARIA, ROMANIA, TURKEY, SOUTH KOREA – EXCELLENT PROSPECTS

Southeastern Europe is becoming increasingly important for LEITNER ropeways. In Bulgaria's largest ski resort, Borovets Resort, and in Muntele Mic, Romania, new 6-seater chairlifts were built. In Turkey, a reversible aerial tramway runs from the tourist destination Beşikdüzü to the panoramic mountain Beşikdağ. Thanks to the construction of the new aerial tramway, the tourism region just 40 km from the provincial capital Trabzon will now boast a star attraction visible from afar.

In the southeast of South Korea, a new tourist attraction has emerged: the bicable gondola lift near the port city of Sacheon runs from a midway station on the mainland to Mount Gaksan and Choyang island. A third of the cabins have been fitted out with glass flooring. The route guarantees breathtaking views and makes the installation a new attraction in Hallyeohaesang National Park.



Voss / NO



SERBIA – BELGRADE

Model for mobility

In Serbia's capital city, LEITNER ropeways is giving tourism a boost. With the 10-passenger gondola lift, which will connect the Novi Beograd part of town to the old town of Belgrade, the city is getting a new attraction and will become a role model for future mobility. Fitted out with the environmentally friendly LEITNER DirectDrive and with exclusive Symphony cabins in Pininfarina design, a system is being installed which is at the top of its game in terms of technology and aesthetics. The route over the Sava River and the construction with especially high, slim supports are both very pleasing to the eye.

Further 2019 projects

LEITNER ropeways is demonstrating its skills in air cushion technology with the aged 30-year-old Dorfbahn Serfaus. The funicular ropeway, well-known for its revolutionary concept, in the Tyrolean ski resort is being upgraded with a technological facelift, with LEITNER ropeways providing all technical ropeway services. These include installing LEITNER DirectDrive, equipping the ropeway with modern safety infrastructure, and supplying a new vehicle comprising a three-part trainset. A comprehensive package including numerous technological innovations from LEITNER ropeways. The work is scheduled for completion in summer 2019.

In India, the completion of the Dharamsala 8-passenger gondola lift is imminent. The system is designed to

better cope with the strong influx of visitors to the home of the Dalai Lama and thus also reduce the high traffic levels at the tranquil mountain village at the foot of the Himalayas.

With two projects, LEITNER ropeways will play a key role in the government-funded advancement of Montenegro in terms of tourism. A 6-seater chairlift is set to make the new ski resort at Bijelo Polje accessible and a new aerial tramway will run from Podvrh Monastery to the popular Dalović Cave. The latter will boast two cabins and will traverse the ravine of the Bistrice River over a span of 800 meters. The ropeway is expected to significantly improve the hitherto difficult access to a partially explored cave world.



Under premium skies



POMA is re-inventing mobility time and time again and, together with its customers, is ensuring exceptional ropeway projects by installing for example valley lifts or resort ropeways. The one-of-a-kind meeting of performance and design can be enjoyed in an impressive way in the Symphony 10 cabins, the new Diamond EVO cabins, and many more, all in line with the demand for performance and design. France saw many firsts thanks to POMA, including the new SmartBoard control station. POMA also offers new approaches away from the slopes such as projects in touristic places. Ropeways as a means of urban transport continue to create new ways of mobility. For example, a 5 km-long system connects all districts of Santo Domingo, the capital city of the Dominican Republic. In Algeria, two ropeways are supplementing one of the world's most extensive urban transport networks, which is set to be expanded even further in the future with new lines. Other highlights include the three connected tricable aerial tramways in Macau, China, and the sixth Metrocable line for the Colombian capital city, Medellin, which has been using ropeways with success since as early as 2004. At the same time as all of this, POMA is constantly strengthening its advancement of products and services in terms of technology and friendliness to the environment. This also includes continuously digitalizing processes and services that meet present-day needs and go a long way to boosting efficiency and customer focus. To strengthen its actions as a responsible company, POMA created its Foundation, operational from spring 2019. The POMA Foundation will support Mobility-oriented projects and solidarity missions.

A ropeway for “legends”

With the new Legends chairlift, POMA has succeeded in combining innovative technology, superior comfort, and a glorious history in the winter sports resort of Meribel. With 102 premium chairs including translucent bubbles, the installation was realized in this form for the first time in France. It replaces the old Plan de l'Homme chairlift and offers unrivaled comfort. In addition to heated seats and headrests, bubbles can ensure a pleasant ride. Legends can be found on eleven backrests of the chairlift: They were embroidered with the names of female ski sport champions who are intrinsically linked

with the history of the place. This means ski legends such as Carole Merle, Deborah Compagnoni, and Lindsay Vonn accompany guests on every ride.

Capacity/direction:	___ 3,600 p/h
Vertical rise:	_____ 582 m
Length:	_____ 1,558 m
Number of chairs:	___ 102





Santo Domingo / DO

DOMINICAN REPUBLIC – SANTO DOMINGO

Congestion-free Caribbean

The capital city of the Dominican Republic is suffering under the effects of growing traffic, especially on the bridges over the Ozama River. However, the traffic situation has significantly improved with the new Teleférico Santo Domingo, opened on May 22, 2018, by President Danilo Medina. The gondola lift connected to the metro boasts 215 10-passenger cabins and connects the center with more than 23 districts in the north-eastern part of the city. It takes 20 minutes to travel the length of the 5 km-long ropeway. It flies twice over the river and can carry 3,000 people per hour in each direction, with their journey tickets valid for the entire city network. This important step towards modernizing urban transport

has also been very well received by residents. After almost three months of operation, the gondola lift has already recorded its millionth passenger! A local 60-man team, trained by POMA, takes care of the maintenance, ensuring seamless day-to-day operation.

Capacity/direction: ____ 3,000 p/h
Vertical rise: ____ 16 m
Length: ____ 5,161 m
Number of cabins: ____ 215

RUSSIA – ARKHYZ

Developing skiing in Northern Caucasus

The Northern Caucasus Resort (NCR) includes five all-season tourism and recreation complexes and continues its ambitious development project in the Caucasus Mountains. In 2011, this project was set in motion in the Arkhyz ski resort. POMA has already built several ropeways on the south side of the resort, including a 4-seater chairlift, an 8-passenger gondola lift, and a 6-seater chairlift with weather protection bubbles. The center of the resort is also finished and impresses with its sophisticated architecture with the finest wood and stone materials. The next expansion stage is planned for the north side. In 2018, POMA completed an impressive 10-passenger gondola lift here, which takes

passengers up to a height of 2,505 meters. It serves as a new connection within the ski resort and allows for comfortable and convenient access to the new slopes. With this new equipment, POMA and NCR mark a major milestone in the resort's skiing experience.

Capacity/direction: ____ 2,500 p/h
Vertical rise: ____ 853 m
Length: ____ 3,547 m
Number of cabins: ____ 101



Arkhyz / RU

Successful systems around the world

FRANCE – COURCHEVEL

A CONNECTION BETWEEN THE VILLAGE AND THE SKI AREA

The French ski resort operator Société des Trois-Vallées in Courchevel has placed its trust in POMA once again. Following the construction of the Ariondaz gondola lift in 2017 and prior to Le Praz, another strategic connection between two ski resorts, POMA has built Les Grangettes. Over the course of the modernization of the ski area, a convenient connection was created between Courchevel Village and the Courchevel 1850 district. Operating daily until 11 p.m., the ropeway has made the lives of tourists, skiers, and seasonal workers a lot easier. The luxurious equipment reflects the extraordinary character of the place. The 40 Diamond EVO cabins, each holding ten passengers, have a particularly elegant design in dark tones. The solar cell-powered LED lighting is a sight for sore eyes at night time.

FRANCE – ALPE D’HUEZ

A MODEL OF INTRA-RESORT MOBILITY

POMA, with more than 80 years of shared history with Alpe d’Huez, has assisted the resort in building a dedicated public transport system. The new Alpe Express gondola lift connects the center of the village with the foot of the slopes and will soon connect to the village of Huez. The new ropeway will replace numerous shuttle busses. Equipped with the DirectDrive and the Cable Position System — an embedded security device — this unique peri-urban ropeway will be the first in France to use the Agent-Free Operation system. POMA customized this equipment to adapt to the need for mobility of the resort's inhabitants and customers. It is part of a strong sustainable development approach.



Val d’Isère / FR

FRANCE – VAL D’ISERE

NEW GONDOLA LIFT AFTER 52 YEARS

La Daille, famous for its incredible ski slopes, is also a notable place for POMA. This is where POMA installed its very first detachable gondola lift in 1966. The time came to do so again 52 years later, with the opening of a new, state-of-the-art POMA system in Val d’Isère. The gondola lift, with 50 Symphony 10 gondolas by Pininfarina – including four VIP cabins – has a spacious interior and the heated seats offer passengers the highest level of comfort. For the Val d’Isère ropeway operation company it represents the pinnacle in offering winter sports enthusiasts the best possible conditions. As part of the Green Globe certification, for example, the number of supports was reduced, a semi-underground garage was built, and a new ticket counter was set up.

of the cabins. POMA focused on the passenger experience and installed 6-passenger Diamond cabins with panoramic windows, more space, and wide-opening doors for easy boarding. This is a successful renovation for a strategic ropeway that maintains its high transport capacity and original design connecting Vaujany to the foot of the slopes.

FRANCE – CHATEL

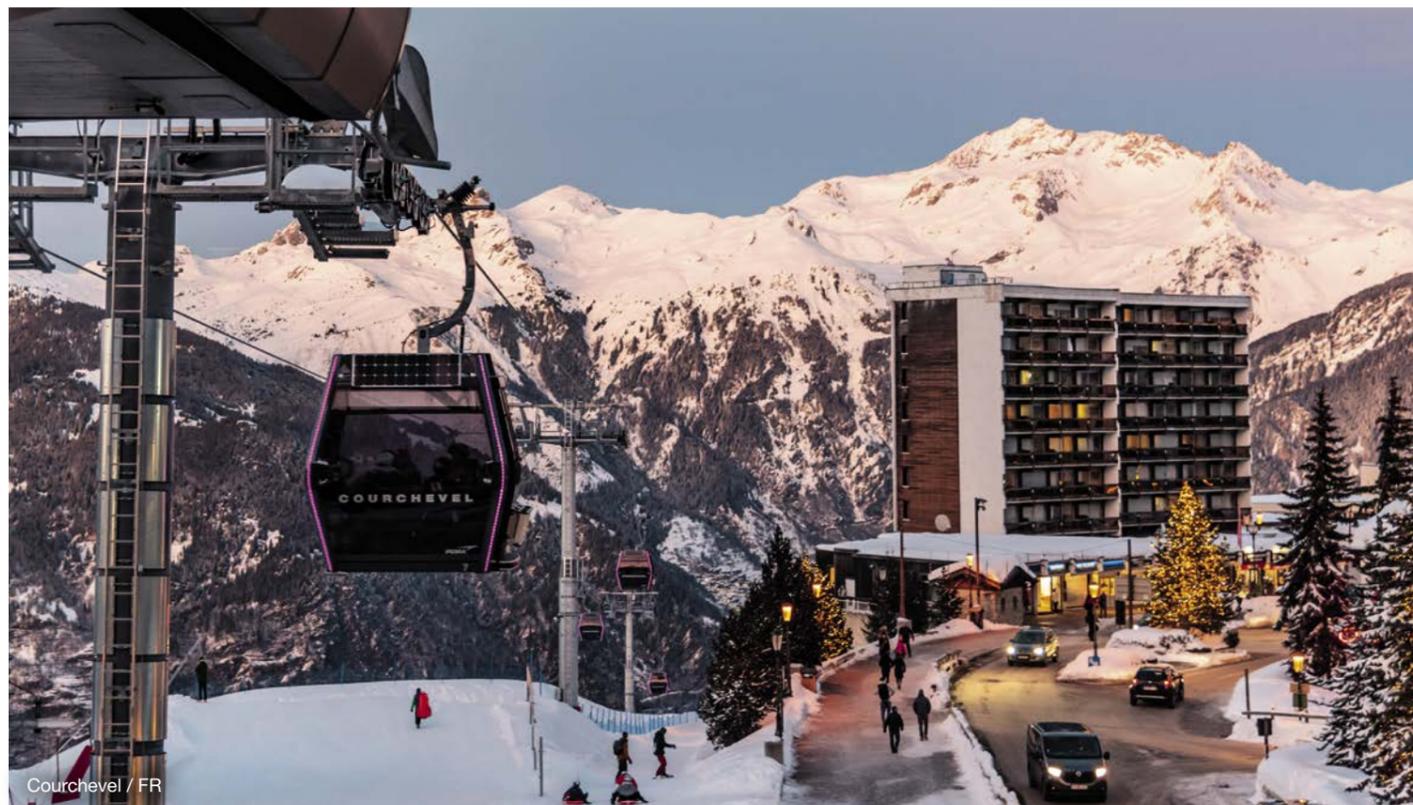
PEAK-LEVEL TECHNOLOGY AND COMFORT

As part of a modernization project, the Châtel ski resort in the French Alps is putting the well-being of winter sports enthusiasts first. Its decision to opt for the new Pierre Longue 6-seater chairlift from POMA was the right one in this respect. After all, this system perfectly combines the highest level of comfort with state-of-the-art technology. The 85 chairs are customized and ideally adjusted with ergonomics in mind offering seating comfort which is second-to-none. The technology is also cutting-edge, as the 1.5km-long chairlift boasts two pieces of advanced patented technology: the advanced DirectDrive ensures sustainability and a high level of availability to this sustainable project, while the Smartboard guarantees maximum ease of use.

FRANCE – VAUJANY

UPGRADED PASSENGER EXPERIENCE

The Montfrais gondola lift is a POMA system from 1987 which connects Vaujany to the ski area. Although the retro design of the 71 cabins was extremely charming, it was high time for an upgrade. The task was very demanding in terms of technicalities as the intention was to retain the original structures and overall weight



Courchevel / FR

**CHINA – MEIHUASHAN
FOCUS ON MOUNTAIN TOURISM**

The city of Lianshi in the province of Guizhou focuses on year-round mountain tourism for good reason: the area of the hills of the city is ideal for winter sports and other outdoor activities at any time of the year. With this tourism project, the former mining town of Lianshi is initiating an economic shift that POMA supported in 2018 by constructing the almost 10 km long gondola

lift, which takes 1,500 people up the mountain every hour. The Meihuashan valley lift is taking passengers to the midway station with a nearby panorama restaurant, then goes on to the Meihuashan International Ski Resort offering hotels and small shops. The new leisure activities can thus be reached from the city in just a few minutes.



Beauval / FR



Lianshi / CN

**INDIA – PATNITOP
SKYVIEW IN KASHMIR**

Patnitop in the Indian state of Jammu and Kashmir, near the religious sites Sudh Mahadev and Mantalai as well as the large cities of New Delhi, Chandigarh, and Amritsar, is a region that is attractive for tourists and counts on these natural assets to become an important tourist destination. A major project for a leisure park with hotel complexes is set to boost this goal. The project focuses on the Skyview Patnitop gondola lift from POMA, the attraction of the park. Skyview takes visitors on a one-of-a-kind 2.6 km journey through the pine forests to the mountain restaurant of Patnitop.

**FRANCE – BEAUVAL
FIRST FLYOVER EXPERIENCE IN A FRENCH ZOO**

Europe's zoo of superlatives – with 10,000 animals and over a million visitors a year on almost 40 hectares of land – has further expanded its range of mobility services. From spring 2019, the new Nuage de Beauval gondola lift takes passengers from “On the Hills of China” to the “Land of the Lions” in 3 minutes. It is the first flyover experience in France on a private leisure site. The 8-passenger cabins, some of which have glass floors, offer spectacular views of the animals and are also convenient for families and people with disabilities. The local staff trained by POMA and a five-year support contract guarantee flawless operation.



Les Diablerets / CH



Winter Park / USA

SWITZERLAND – LES DIABLERETS HIGH-PERFORMANCE GONDOLA LIFT

The project in the Diablerets ski resort was managed by BACO, POMA's Swiss subsidiary. In Diablerets, a modern 10-passenger gondola lift was built to replace the old 4-seater chairlift. This is the first gondola lift in the Vaudoise Alps with a high transport capacity of 2,500 passengers per hour. The gondola lift is equipped with DirectDrive technology for optimized power consumption and high availability, as well as with the Smartboard for optimal control of the ropeway.

USA – COPPER MOUNTAIN COLORADO HIGHEST LEVEL OF SKIING FUN IN AMERICA

Copper Mountain, 120 km from Denver, is one of Colorado's most popular ski resorts and is among the highest resorts in America with a top elevation of 3,541 meters. POMA has implemented two ropeways in this area. The American Eagle Telemix system is the first of its kind from LEITNER POMA of America and one of three ropeways in America to be equipped with

DirectDrive this year. It increases capacity by 33%.

The American Flyer, with a length of over 3 km and 182 chairs including weather protection bubbles, is particularly long and may well be the longest bubble chairlift in the world. The blue weather protection bubbles lend the ropeway a clearly visible distinguishing feature and are very popular among the skiers.

USA – WINTER PARK COLORADO BRINGING MODERNITY SINCE 1980

Winter Park, one of America's oldest and most popular ski resorts, can be accessed easily by train from Denver. Exclusively, LEITNER POMA has provided all their lifts since early 1980's. Since summer 2018, a new 10-passenger gondola lift has replaced the Zephyr 4-seater chairlift, which was named after the famous long-distance train in the Rocky Mountains. The ropeway transports 3,600 people per hour over a distance of 1,714 meters. As well as providing access to the "Sunspot" summit restaurant, which can be reached during the day as well as at night, the new ropeway construction constitutes a significant upgrade for the resort.

ALGERIA – BAB EL OUED & TLEMCCEN OPTIMIZING URBAN TRAFFIC

North Africa's largest metropolitan area has expanded its range of urban transport services with a new gondola lift integrated into the existing transport network. The ropeway offers a passenger capacity of 2,400 people an hour and connects the once isolated hillside village of Zghar with the huge Bab el Oued district. The 66 10-passenger cabins are equipped with lighting for night transport and ventilation to beat the heat. Furthermore, the cabins also light up at night. In Tlemcen, after four years of standstill, the 2 km long urban ropeway was put back into operation. This system connects the Grand Bassin Park in the city center to the leisure park on the Plateau Lalla Setti. To strengthen the transport offer, a new bus station was opened at the same time the renovation was completed.

EGYPT – GALALA CITY OPENING THE WAY FOR THE FUTURE

At the second largest construction site in Egypt after the new Suez Canal, a visionary project was launched in October 2015: Galala City. A symbol of the country's modern future, the project is structured around three development axes: the creation of an urban area at the top of the Al Gala plateau, the development of a new industrial area, and the expansion of facilities for tourists. POMA installed a gondola lift to facilitate transportation between the residential area and the coast of Ain Sokhna. The length of the route amounts to 4.37 km, making it the longest stretch between two stations in the Middle East and Africa. The project's importance to the economy of the country was demonstrated at the opening ceremony on September 7, 2018, which was also attended by Egyptian president Abdel Fattah el-Sisi.



Tlemcen / DZ

Outlook for 2019

FRANCE – COURCHEVEL

All-season mobility

In spring 2019, work has begun on the new 10-passenger gondola lift, which will connect the village of Le Praz, where a large car park is currently being built, to the center of the ski resort. This new valley lift will take skiers to the foot of the slopes in Courchevel 1850 and will prove particularly useful for the 2023 World Ski Championships. The new connection is also beneficial outside of the ski season. It goes downhill to the lake and to numerous other leisure activities, reinforcing Le Praz as an attractive place in summer too. In terms of technology and appearance, the new ropeway is in line with the Grangettes gondola lift opened in 2018. The 47 comfortable EVO cabins, fitted with LED lighting and solar modules, transport 2,400 people per hour. There is no better way to prepare for the onslaught of fans at the World Championships.

FRANCE – BOURG SAINT MAURICE

Funicular ropeway is brought up to date

The Les Arcs' Express has been linking the Les Arcs 1600 ski resort and Bourg Saint Maurice commune for almost 30 years. As a pioneer in multimodal travel, the funicular offers thousands of skiers and daily users a direct, seven-minute connection between Les Arcs ski area and the Bourg Saint Maurice railway network. POMA is now bringing the ropeway up to date. The cars, with their glass roofs, go a long way to ensuring a pleasant ride. The relocation of the driver's cabin to the center of the funicular also creates space at the front and rear for roomy panoramic areas. With a view over the valley and nature, passengers get a clear feel for the key role that the environment plays for Bourg Saint Maurice. This also applies to the ropeway, which is 100% electrically powered and integrates seamlessly into its surroundings thanks to its elegant design and fitted with LED lighting.



Medellín / CO

COLOMBIA – MEDELLÍN

Weaving the social link

In 2004, Medellín was a pioneer with the integration of a ropeway into the transport network. Today, with its five "Metrocable" lines, the city is the global reference for sustainability in the area of public transport. Now with the sixth line, Medellín is once again proving itself to be a pioneer. The Picacho Line, newly built by POMA, is the world's first urban 12-passenger gondola lift capable of transporting 4,000 people per hour. The ropeway will play a central role for the 420,000-population district, making it the social link that ensures a better quality of life.

CHINA – ZHUHAI

World premiere: three connected 3S aerial tramways

The Chimelong Group operates theme parks and hotels in Guang-zhou and Zhuhai. In 2017, the Safari Park in Guang-zhou, one of Asia's largest zoos, was equipped with three aerial tramways connected as a triangle. In the second theme park, keeping up the pace and continuing with POMA, the group decided to give Ocean Kingdom (8.5 million visitors) a new ropeway, unlike no other in the world. This new line consists of three interconnected tricable detachable aerial tramways, operating in a triangle again. On its 4.5 km route, this technological innovation offers a breathtaking view over Macao Bay. The journey in the comfortable and elegant Symphony cabins designed by Pininfarina, which seat 32 passengers, is not just spectacular during the day: at nightfall, the LED lighting of the cabins will illuminate the park landscape and the view through panoramic windows will become an experience like no other.

SERBIA – ZLATIBOR

The longest panoramic ropeway

Serbia has been old ground for POMA for a long time now. The latest project is the longest panoramic ropeway in the world. Over a distance of 9km, tourists are transported from Zlatibor to the city's leisure resort in 25 minutes. The municipality of Čajetina is planning an extensive tourism offer here, with ecology playing an important role in the construction of the gondola lift. POMA is implementing appropriate technical solutions such as underground machinery to limit noise pollution.



Bourg Saint Maurice / FR

© Manu Revbox

Transporting material by air



The year 2018 ended with positive figures. Ahead of the game when it comes to technology and the environment, AGUDIO material transport systems have been used with success around the world for years, allowing new cable cranes and Flyingbelts to come on stream and important orders to be closed.

This once again underpins the exceptional position the AGUDIO brand holds when it comes to new customers. AGUDIO is viewed not only as a supplier of machines and systems but also as a technology partner that understands their needs and meets them with powerful, reliable, and sustainable solutions. It is not surprising that AGUDIO is on the frontline when it comes to transporting large quantities of material to hard-to-reach places.

Reliable material transporter

DAIVÕES, PORTUGAL CABLE CRANES ARE RELOCATED

In spring 2018, two AGUDIO cable cranes commenced operations in Daviões. After dismantling the cable cranes at the Foz Tua dam in Portugal, the two systems were installed on the 264 m long and 77 m high arched dam of the Tâmega River hydroelectric power plant, 75 km from Porto. With a span of 385 m, the two cable cranes are permanently anchored to the ground and have a load bearing capacity of 28 t. By placing an order for the general overhaul, installation and commissioning of the two cable cranes, the Ferrovial/MSF Berragens consortium has very clearly expressed its trust in the reliability of AGUDIO systems.

FLYINGBELT GENOA, ITALY THROUGH THE AIR WITHOUT SUPPORT

An access shaft for tunnel excavation for the new railway has been built on the construction site of the new high-speed railway track between Genoa and Milan in the municipality of Campomorone in the Liguria region. From here, all excavation material removed is transported to a quarry in Castellaro by a new AGUDIO Flyingbelt. The 350 m long conveyor belt, which gets by without support, allows 800 t of material to be transported from the excavation site to the quarry in an environmentally friendly manner. The use of this technology significantly reduces the need to make numerous trips by truck in order to transport the excavated material.



Castellaro / IT



Daviões / PT

Outlook for 2019

In North Rhine-Westphalia, Germany, north of Düsseldorf, a 500 m long Flyingbelt is set to be commissioned above the Lippe river. The Flyingbelt will transport 400 t of dyke construction material to the north shore per hour, shortening the 7km transport journey to just 500 m.

In Portugal, AGUDIO is involved in the construction of the dam for Alto Tâmega, the country's largest hydro-power project, where two parallel cable cranes with a load bearing capacity of 28 t and a span of 620 m are being built.

The cable crane, which was needed for the construction of the Gibe III dam, is being used once again for the construction of the Koysha dam in Ethiopia, this time completely restored and upgraded to transport 35 tons.

In Brazil, an AGUDIO Flyingbelt will provide a direct connection between a large international cement producer and a new limestone quarry. With a span of more than 800 m, the system is able to cross a wide valley and thus shorten the 9km transport journey to 1.7 km.

Big names in the major project, cement, and mining sectors trust AGUDIO as a reliable partner with customized and environmentally friendly material transport solutions. Innovative technologies and long-standing expertise make for significant cost savings – one of AGUDIO's greatest strengths.

Legends on tracks

Prinoth

The year 2018 marked another impressive performance for PRINOTH, with record sales of the LEITWOLF and X-park vehicle series. Boosted efficiency while protecting the environment makes for an unbeatable selling point which distinguishes PRINOTH vehicles from the rest. The demand for SNOW HOW fleet management and snow depth measurement was also high. PRINOTH and Leica Geosystems have proven themselves as a well-coordinated team, offering the most precise snow depth measurement in the world.

PRINOTH is not just impressive because of its superior product quality – its After Sales service also receives positive feedback from all around the world and has been further expanded. A new spare parts warehouse in Salt Lake City ensures quick and efficient support for North American customers.

The brand's high standing is based on the first-class quality of PRINOTH groomed slopes. The Alpine World Ski Championships in Åre and the Nordic World Ski Championships in Seefeld, for example, rely on PRINOTH as their official partner. As does the Vasaloppet in Sweden – a race as legendary as PRINOTH's vehicles.

Snow groomers

On the right track around the world! Known for excellent working performance, efficiency, and their attractive design, PRINOTH snow groomers are far superior to others when it comes to cleanliness. PRINOTH is a pioneer in sustainability, resource conservation, and environmental sustainability. Thanks to their low emission values, PRINOTH vehicles are particularly in demand in ecologically sensitive areas, such as high mountain ranges. With its ongoing conversion to the latest stringent emission standard, EU stage V, PRINOTH is reducing its environmental footprint even further.

With PRINOTH, the number one on the market, not only is your drive environmentally friendly but also extremely reliable. PRINOTH engine technology is put through its paces and equipped for every use. Sophisticated technology, low consumption values, and high performance all at the same time – these are advantages that PRINOTH customers appreciate.

PRINOTH – the first choice for the environment
 + the PRINOTH fleet is the most efficient in the world
 + conversion to EU stage V emissions standard
 + new engine technology for increased sustainability and efficiency



PRINOTH fleet

SNOW HOW

Slope management – revolutionarily simple



3D snow depth measurement



Fleet management

PRINOTH SNOW HOW shows what slope management can accomplish in the modern day and age. It comprises the software for snow depth measurement, developed in cooperation with Leica Geosystems, and the PRINOTH fleet management. All information is transmitted in real time and is accessible via a single user interface, allowing users to see the vehicle's status, operating time, location, speed, key engine and vehicle figures, and the winch, tiller, and lighting conditions. The operator can see the exact snow depth and route profile on an extra monitor. User-friendliness is of utmost priority when it comes to PRINOTH SNOW HOW: everything at a glance, intuitive operation, and no time-consuming switching between various different programs. PRINOTH SNOW HOW is second to none when it

comes to optimizing work procedures and designing vehicles with efficiency in mind. It boasts well-thought-out programs that have been tried and tested on the mountain. For slope management that lowers costs and conserves resources while at the same time being revolutionarily simple.

PRINOTH SNOW HOW – digital efficiency
 + a user interface for all data
 + 3D snow depth measurement
 + accurate data collection, precise vehicle monitoring
 + optimization of work procedures
 + maximum performance under all conditions
 + measurement under the blade and vehicle at all speed levels



PRINOTH X-Community

PRINOTH X-COMMUNITY

Network of enthusiasm

The PRINOTH X vehicles, designed especially for constructing parks are causing a stir around the world. Thanks to sophisticated technology, snow parks, family parks, and competition facilities can be built and prepared with an extremely high level of efficiency and adapted to the respective ski resort. The PRINOTH X-Community – the world's largest park network – emerged from partnerships all over the globe. PRINOTH relies on long-lasting partnerships with professionals in order to meet the requirements of a perfect snow park in the best possible way. The implementation is made easier with well-grounded knowledge and an unerring sense for the needs of athletes and amateurs.

The recent expansion to include Today's Parks from Canada and Infinity Dreamers from Japan is testimony to the attractiveness of the PRINOTH X-Community. Both partners offer high-profile consulting services for the de-

sign, creation, construction, and management of snow parks. Working together, the PRINOTH X-Community puts on specular events, such as the Red Bull Road Gap Session with Bene Mayr and Markus Eder on the Passo dello Stelvio or the X CAMP – the world's only pre-season training offer for athletes.

PRINOTH X VEHICLES

- + no fewer than 10 international partners put their trust in the agile and flexible PRINOTH X vehicles
- + innovative operating concept with joystick-in-joystickcontrols
- + ideally equipped for work in the park
- + 12-way rake blade and blade-side-cutter for razor sharp precision

TRACK PORTFOLIO

A tough act to follow

One glance at the range of tracks shows just who is the expert in providing grip between the snow groomer and the snow. PRINOTH has the right track for every snow condition, whether its made of aluminum or steel. The most comprehensive range on the international market. This is all thanks to decades of experience, technically mature down to the last detail. It can't be seen, but you can hear about it around the world: utterly reliable. A PRINOTH track holds and is ready for use under all conditions. Whether on a glacier, fresh snow or powder snow, ice, or asphalt – PRINOTH has the perfect tracks.

PRINOTH – cutting-edge tracks for every use

- + Steel tracks – for toughest conditions
- + Aluminum tracks – the durable all-rounder
- + All-season tracks – gentle year-round use
- + Gamskette tracks – superb grip when steep



PRINOTH tracks

Tracked Vehicles

In 2018, PRINOTH was able to achieve a significant growth for its tracked vehicles product-line. Equipment demand for infrastructure projects in the power electric sector as well as for mining and environmental restoration was high throughout the year. Higher energy prices and growth in U.S. onshore oil & gas positively influenced the demand for pipeline equipment and our sales. In addition, there were strong results in After Sales, especially for consumables and wear parts due to the constantly growing number of PANTHER vehicles in the field.

Strong partner with reliable machines



Mining with exploration drill

PERFORMANCE

Leadership through Reliability

PRINOTH strives at developing strong relationships with its distributors and it is proven that they increased their focus on off-road construction vehicles when they recognize they have a partner working hard at solving their problems faster, providing innovative equipment solutions always with a very reliable product-line. Nowadays, the limited qualified workforce poses many challenges to contractors. PRINOTH responds by offering a vehicle that is easy to operate allowing contractors to rapidly become more productive with less time invested on training. Another challenge we often hear from contractors is that equipment maintenance and downtime are expensive and negatively impact their bottom line. With best-in-class durability of its components and reliability of its machines, PRINOTH can ensure contractors work without being preoccupied.

PRINOTH ONBOARDING PROGRAM

Win-win partnership

PRINOTH's vision is to increase the profit of its distribution partners with industry-leading quality products and support services. Dealers are recognized as capital investors with real expectations for return on investment. PRINOTH recognizes the highly competitive nature of industrial equipment and know that "value" means a lot more than inexpensive price. Promoting the PRINOTH brand should be a financially rewarding decision. The company is committed to making that happen. As such, the PRINOTH Onboarding Program was introduced in 2018 with the goal to provide an enjoyable experience while doing business with PRINOTH.

- PRINOTH Tracked Vehicles**
- + Best-in-class productivity level
 - + High reliability due to careful testing of all products
 - + Robust thanks to high-quality parts & technology



ALTEC with Spyder outriggers

Vegetation Management

The mulching boom: In 2018, storms, beetle infestations and extremely dry weather provided for strong demand in Central Europe. As well as mulchers, customer-oriented solutions played an important role. For example, with the Plug & Mulch system, the company also successfully entered the important hydraulic market. The expansion of the sales network paid off: In North America, the company achieved a leading position with the launch of the M450s in the skid-steer loader class. The development in the field of renewable energies is very promising. A large market for harvesting of biomass has developed in Cuba to this end. After numerous test runs in cooperation with customers, the RAPTOR 500 in the 400-500 HP class is about to be introduced on the market. The test

runs were successful and the launch is scheduled for the second quarter of 2019.

Excellent
working
performance
Optimum
efficiency



Mulching head M450s



Assembly

M450s BLACK EDITION

PRINOTH HERDWANGEN, GERMANY

Hydraulic all-rounders

Hydraulic attachments are now amongst the best-selling products in Herdwangen's site portfolio. With the M450s-1900 mulching head, a completely new development was launched on the market in 2018. As a plug & mulch solution for skid steer loaders and hydraulically driven carriers, the M450s is extremely flexible. It can be mounted on carrier vehicles of all manufacturers and models that are commonplace on the market, from 80 to 150 HP and a volume flow between 100 and 200 l/min. The M450s draws its tremendous power from a 107-cm Rexroth hydraulic motor with high-pressure adjustment and a new toothed belt drive. The premiere in North America exceeded all expectations – a good sign for the product launch in Europe.

Fit for the future

The expansion of the Herdwangen site is making good progress. After the change of name from AHWI to PRINOTH, the internal processes were converted to SAP in 2018 and adapted to the PRINOTH Group. A big step forward was the modernization of the assembly hall. Swiveling individual cranes at each assembly site facilitates productive and efficient work. PRINOTH GmbH is very well prepared for the future. And it is also a workplace that works hard towards having satisfied employees. This is put forward by PRINOTH's latest award where the company has been recognized for its support of local volunteer work. The prize was awarded by the Baden-Württemberg Ministry of the Interior for a period of five years.

PRINOTH Herdwangen

- + PRINOTH Group's production site in Germany
- + Competence center for Vegetation Management
- + Hydraulic and mechanical mulchers
- + RAPTOR carrier vehicles, rotavators and stump grinders



RAPTOR 300

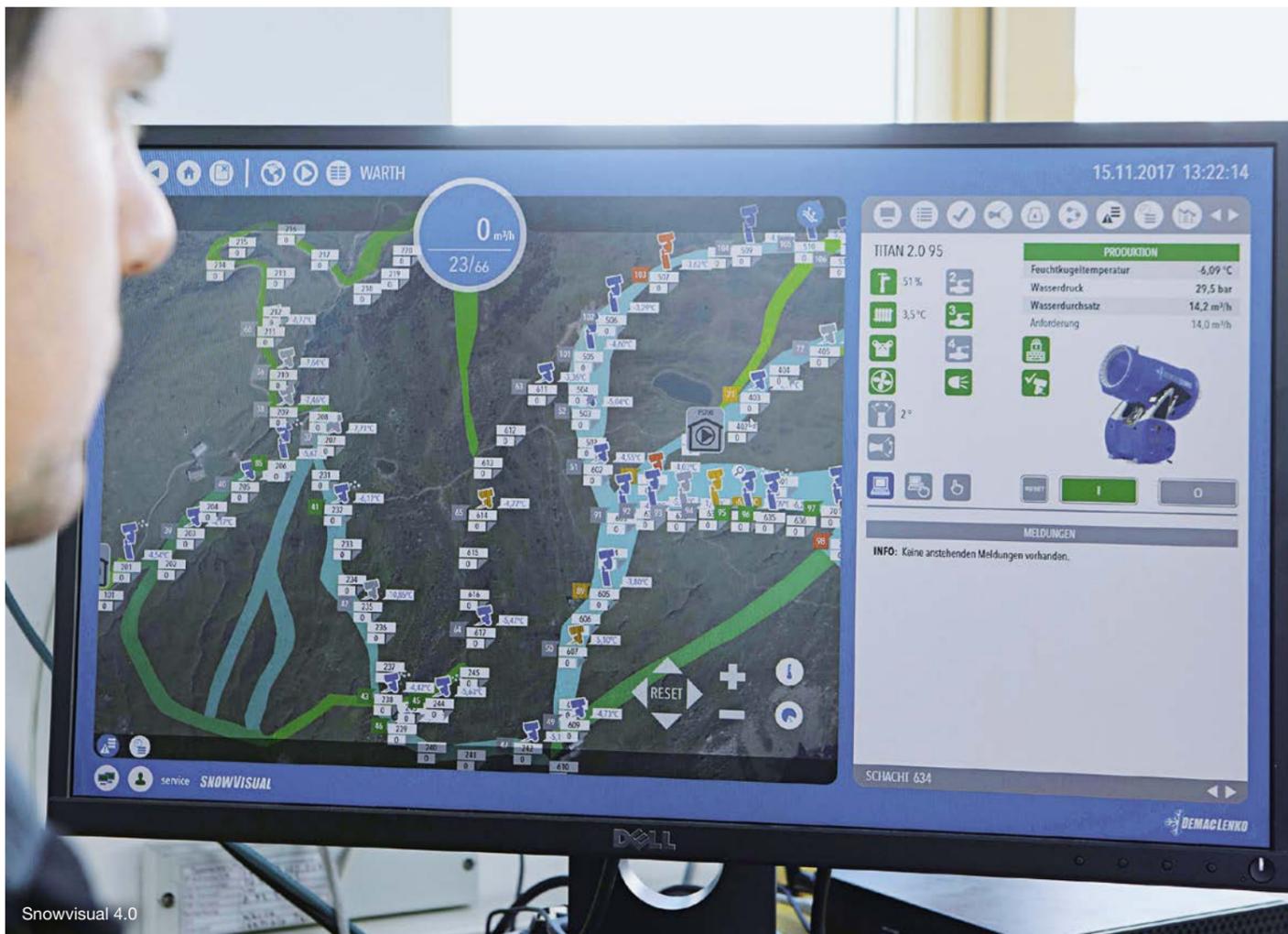
Snow master



DEMACLENKO outdid itself once again in 2018, producing more than 2,000 snow-makers! An impressive result that rests on a simple basic principle: innovation and the continuous further development of products with the main focus lying on sustainability. Excellent snow quality, maximum output, and an unparalleled energy footprint all ensure DEMACLENKO's leading edge which serves its success throughout the world.

DEMACLENKO is also well ahead in terms of digitalization, the greatest example thereof being the Snowvisual 4.0 – software to control the whole snowmaking system. The technology leader's solution allows for automation of work processes to a level not previously possible, and all at the highest level of perfection, guaranteeing accurate utilization of resources and optimal use of snowmaking windows.

The year 2019 marks a new era for DEMACLENKO, with its new headquarters opening in Sterzing. Housing also LEITNER ropeways and PRINOTH, a center for winter sports technologies is coming to life which will be the first of its kind in the world. This joint site will mean knowledge and expertise can be exchanged even more efficiently and synergies harnessed, creating the best conditions to further strengthen the company's strong position on the market.



Snowvisual 4.0

ALPINE WORLD SKI CHAMPIONSHIPS CORTINA 2021

Snowmaking technology for world champions

For the 2021 Alpine World Ski Championships in Cortina, the ski resort Tofana Freccia nel Cielo saw no other option than to choose DEMACLENKO for the development of its existing snowmaking systems – a EUR 2 million project for the snowmaking specialists. The Pista A del Col Druscié – the venue for slalom disciplines and team events – and the Pista B del Col Druscié training

piste were fitted out with 40 new Titan 3.0 and Evo 3.0 snowmaking systems as well as 91 concrete pits, complete with pipelines. The extended Cristallo pumping station will be complemented by three new stations with a total capacity of 400 l/s. The turnkey overall concept is rounded off with the DEMACLENKO Snowvisual 4.0 control software assuring smooth operation.

2018 PROJECTS

Digital and sustainable

SNOWSHOE MOUNTAIN SKI RESORT – A PUNCTUAL START TO THE SEASON IN WEST VIRGINIA (USA)

Automatic snowmaking, perfect slope conditions, lower energy costs – these are all very well received in the US too. In 2018, for example, the management team of the Snowshoe Mountain Ski Resort, a member of the Alterra Mountain Company, strengthened its snowmaking network with 75 fully automatic DEMACLENKO propeller machines. They decided on Titan, the most powerful snow gun on the market, which offers maximum results even in the marginal temperature range. The degree of automation was an aspect that left a lasting impression. With the help of the Snowvisual 4.0 visualization technology, the snow guns can be operated more efficiently

and the available resources used more sustainably thanks to the fully automatic operation. The data is also evaluated automatically, making it possible to optimize the snowmaking operation at any time – even from a smartphone or tablet. It couldn't be simpler. The new equipment has proved its worth for the Snowshoe Mountain Resort, where optimal use could be made of the snowmaking windows, allowing the season to start punctually on November 21. A further success is the saving of 5,000,000 kWh – as much electricity as 500 American households consume each year.



Snowshoe Mountain / US

GETTING CLOSER INTERNATIONALLY

Getting even closer to the customers: in addition to the branch offices in Italy, Austria, Switzerland, France, and the US, DEMACLENKO has also been present with a branch in Poland since 2018 as well as on the Chinese market with its own team.

The decision to open the branch office in southern Poland was made after a strategic consideration. The Bielsko-Biała site is located in the immediate vicinity of numerous winter sports destinations based in the northern Carpathians. It serves not only as an ideal starting point for the Polish market, but also for the Czech Republic, Slovakia, Ukraine, Belarus, and the Baltic

States of Lithuania, Latvia, and Estonia. The design and implementation of turnkey snowmaking solutions is best carried out directly on site.

DEMACLENKO is rapidly reinforcing its position on the Chinese market, which is now the company's third strongest. The DEMACLENKO China team, part of POMA Beijing, has already managed to implement projects with success. One of these was for the Ice & Snow Festival in Harbin, and another in the Fulong ski resort in the Chongli district, where the majority of the competitions for the 2022 Olympic Winter Games will be held.



Praz de Lys / FR



Fulong – Chongli / CN

Outlook for 2019

2019 is another year that will be marked by intensive development. Combining sustainability and efficiency with performance, technology, and design at the highest level is an ongoing challenge – and a task which leads to innovative solutions time and time again. The internationalization campaign is also being resolutely pursued. By reinforcing the teams at individual branch offices, the intention is to consolidate existing partnerships and, above all, forge new ones.

New snowmaking systems will be implemented in 2019 too, such as in Kitzbühel and Silvretta Montafon in Austria, Plose in Italy, Lago Hermoso in Argentina – to name a few future references. A Ventus 4.0 turnkey complete solution with 125 propeller machines, best known for its unbeatable balance between the amount of snow produced and the amount of energy it consumes as well as its groundbreaking Pininfarina design, is coming to fruition in Söllereck, Germany.

Win-Win-Wind



A recent study once again underscores the position LEITWIND has attained since its founding 10 years ago: LEITWIND is right at the top of the list of Italian market leaders in wind turbines in the 200-1,000 kW category, holding this spot thanks in large part to DirectDrive as well as other systems. This unique wind turbine generator has now also become the centerpiece of some ropeways as their drive system and is unrivaled in terms of technology.

Through ongoing investment in research and development, LEITWIND was able to seize new market opportunities and further strengthen its position once again in 2018. LEITWIND consolidated its presence in Italy with the installation of nine wind turbines, including the first LTW90. The POMA LEITWIND partnership proved highly effective and opened the door to the French market, examples for which are the six LTW80 wind turbines in the pipeline for the Guadeloupe island and the 16 LTW62s being installed in the Pyrenees as part of the first RES repowering project. In Germany, preparations have been finalized for the debut of the “small” LTW42.

It was a challenging year with positive prospects. New systems and ordered machines will be installed in due course and, with the LTW42, entry into a business segment with a future is just around the corner. Win-Win-Wind for the environment and operator.

Efficiency is kicking up a storm

LTW90 – DEBUT ON THE ITALIAN MARKET

The installation of the first LEITWIND LTW90 in Italy was completed in the community of Vallata (province of Avelino) in October 2018. With an output of 900 kW and a hub height of 75 m, the new wind turbine complements LEITWIND's successful and tried-and-tested technology, which guarantees peak performance and low maintenance requirements. A key advantage is the large rotor surface, which enables a high level of production at all sites, even when wind speeds are low. Improved efficiency combined with its moderate size makes for a tailored solution for markets like Italy.

LTW42 – THE RACE IS ON FOR “THE SMALL ONE”

Since the presentation of the LTW42 project, all LEITWIND departments have been working intensely with b.ventus, a start-up of the German energy giants E.ON, to develop, design, produce, and market the “small” LTW42. The turbine, boasting a rotor diameter of 42 meters and a nominal output of 250 kW, offers a very low specific output of 184 W/m² and is perfectly suited to particularly low-wind areas. The low total height of under 50 m substantially facilitates the authorization procedure and the system can also be installed a short distance away from existing buildings. A further benefit is that the connection is compatible with the low-voltage network at 400 V and can be directly hooked up to the customer's distribution grid. This is ideal for efficiently using and producing your own energy.



LTW42, 250 kW, Steinfeld / DE

Outlook for 2019

POMA LEITWIND – A STRONG TEAM

The partnership with the subsidiary POMA has proved a great success. LEITWIND's expertise when it comes to Italian wind turbines and the French production competence at the new Gilly sur Isère site allowed for a successful entry into the French market – with two ongoing projects.

Project number one: six LTW80 1.65 MW hh48 typhoon class GL IA will be installed on Guadeloupe, the Atlantic island belonging to France. With the supply and maintenance contracts already signed, the wind turbines will come on stream in 2020.

Project number two: In June 2018, LEITWIND was declared the winner of the tender for the RES repowering program and honored for its solution. The Group manages more than 3.5 GW of wind power throughout the world. Sixteen LTW62 wind turbines with a capacity of 1.5 MW each are expected to be installed in the Pyrenees by mid-2021.

STEPPING FOOT IN GREECE

It all started with the delivery of LEITWIND's most powerful model, LTW101 3 MW, and LEITWIND's conquest campaign is now forging ahead on the Greek peninsula. Numerous negotiations are underway; many are already in their final stages. LEITWIND can look forward to a strong year with European-wide growth.



Vallata / IT

Making a difference with sustainability

Sustainability is not just a guideline for our Group, but rather also the incentive to perform at the highest level. From the work processes and manufacturing technology in our production facilities, to our own power generation and the development of our innovative high-tech solutions, we do everything we can to expand our leading position in the area of sustainability and to develop the business of our Group responsibly. Thanks to the innovative strength of our experts in the areas of research and development, we are able to further reduce the energy consumption of our products year after year and lessen our ecological footprint. Progress that makes our wind power and ropeway systems, passenger and material transport systems, snow groomers and utility vehicles, and snow making systems the benchmark for environmental friendliness and strengthens our growth. Sustainable actions for us, however, are not just about developing corporate values. With a variety of activities in the areas of occupational safety, health, and further training, as well as the environment, culture, and social matters, our Group is dedicated to its employees and society.

Environmentally friendly on both large and small scales

DIRECTDRIVE – ENERGY SAVING

DirectDrive, developed by our company, is the world's unique gearless drive system for ropeways. The system consists of a synchronous motor working at low speed. Foregoing a complex gear system means the drive is considerably more efficient and economical. In 2018, 7,037,915 kWh of energy were saved this way.

The energy saved would have
been enough to supply

1,759
households



DirectDrive Spieljochbahn / AT



DirectDrive Piz Seteur / IT

DIRECTDRIVE – WITHOUT ENGINE OIL

DirectDrive works using a synchronous motor with an output shaft that is directly linked to the sheave. Unlike conventional planetary gearboxes, this one does not need any engine oil.

75,588 l
of lubricants
saved since 1999

E-CARS

Since protecting the environment and climate is of utmost importance to our Group, electric cars have been included in our fleet since 2018 and are at the disposal of our employees.

Our two e-cars traveled
40,000 km
in 2018



RENEWABLE ENERGY

LEITWIND turbines generated 850,000,000 kWh of green energy. This approximately corresponds to the annual power consumption of 26 small towns.

850,000,000 kWh
of green energy

HIGH TECHNOLOGY INDUSTRIES



LED LIGHTING

Since the introduction of LED lighting in the LEITNER production hall in Unterackern in 2017, we have been able to save 209,411 kWh of energy, reducing our total energy consumption by around 10%.

WOOD CHIP HEATING SYSTEM

In our Group, having a sustainable relationship with nature is paramount. In 2018, for example, 613,463 kWh of energy were generated by a new wood chip system at PRINOTH in Herdwangen. Instead of coal, untreated, CO₂-neutral wood chips were used as fuel for this heating system.

75 t
less coal



REGIONAL PARTNERS

POMA France has proved its commitment to sustainability by working primarily with local companies. All of the building material for the new site in Gilly-sur-Isère originates from France.

100%
"MADE IN FRANCE"

LOW ENERGY CONSUMPTION

Through many small changes (air curtains, white instead of black production hall roof, better infrared heaters, LED lighting), PRINOTH Canada's consumption of natural gas has been reduced by 50% since 2005.

50%
less natural gas



Taking responsibility

FURTHER TRAINING

Through our wide-ranging training program, employees in Austria, France, and Italy alone spent 21,797 hours of training in courses on foreign languages, occupational health and safety, management, and personal health.

136 months
of further training



Interns



POMA, Gilly-sur-Isère / FR

INTERNS

To support young people at an early stage in their search for a career, we offer internships in all business sectors.

198
internships in Italy,
Austria, and France

HEALTH CHECK-UPS

Free health check-ups are offered to POMA employees in Beijing / CN. Once a year, all employees can take advantage of a free occupational-health check-up. Employees whose work exposes them to specific risks can make use of this opportunity twice a year.



POMA, Gilly-sur-Isère / FR

DONATING AND SPONSORING

Social commitment is part of our corporate philosophy, which is why our Group supports non-profit organizations with donations as well as sponsoring of cultural and sporting activities.

€ 991,431
were donated in 2018



LEITNER, Vipiteno / IT

FRESH FRUIT

Eighteen tons of fresh fruit were distributed free of charge to employees in Italy and Austria. This amounts to 72,000 daily portions.

18 t
of fresh fruit

HEALTHY FOOD

In LEITNER and POMA canteens, employees were served 171,713 high-vitamin, balanced, and vegetarian three-course meals. This corresponds to around 720 employees being fed every working day.

171,713
three-course meals



Global production and administration sites



Telfs / Austria



Grenoble / France



Gilly-sur-Isère / France



Montmélan / France



Passy / France



Veyrins / France



Herdwangen / Germany



Granby / Canada



Grand Junction / USA



Salt Lake City / USA



Vipiteno / Italy



Vipiteno / Italy



Selva Gardena / Italy



Chiusa / Italy



Turin / Italy



Stará L'ubovňa / Slovakia



Beijing / China



Chennai / India



