POMA, WORLD LEADER in cable transportation







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A pioneering SPIRIT

After more than 80 years in business, POMA's pioneering spirit remains as strong as ever. We've successfully preserved and maintained our ability, engraved in the company's DNA, to break new ground and take risks. Today, as I am proud to say, we are a **world leader in cable transportation**.

We design and build transportation that puts **smooth and sustainable mobility** at the heart of the urban, snow, tourism, science and industrial transportation sectors. Our success is also that of the **passionate visionaries** at POMA who constantly strive to reach higher summits while meeting challenges and overcoming obstacles wherever the company is active.

Our goal has always been to **spread French excellence and expertise** throughout the world, transposing the knowledge acquired in mountaineering onto other industries like the urban sector.

At the heart of our success lies a healthy dose of **innovation**, **commitment** and **creativity**, as well as a strong **international dimension** that has been part of POMA since day one. We create ties across the globe, helping to write the history of urban transport worldwide with humility, rigour and a passion that knows no bounds.

Jean Souchal, POMA Chairman of Board





POMA, WORLD LEADER

in cable transportation

French-owned and based in Voreppe, near Grenoble, France, POMA has become a world leader in cable transportation with a presence on six continents and more than 90 countries. Employing 1,200 people worldwide (75% in France), the POMA Group achieved a turnover of €450 million in 2018.

The company's success began 83 years ago in the snowy peaks of Alpe-d'Huez when engineer and passionate mountaineer Jean Pomagalski built the first surface lift. This invention marked the beginning of recreational skiing in Europe and the US, where the drag lift is still known as the "poma-lift".

The visionary Pomagalski did not stop there, providing Chamonix with its **first chairlift in 1956** and creating the **first gondolas in 1967**.

The company was officially **founded in 1947** and the POMA adventure began.

POMA hasn't stopped innovating since, lending its knowledge and expertise to the urban transport, snow, tourism, science and industrial sectors. From alpine peaks to major cities, our proficiency in turnkey projects — design, construction, operation and maintenance — is **recognised the world over**.

Our high-performing, energy efficient cable transportation systems are designed to overcome all the challenges

of urban mobility... We are active in both Western and Eastern Europe, Asia, Africa, North and South America, Australia and New Zealand.

The numbers speak for themselves: POMA has **8,000 installations** located throughout the world, with operations currently up and running in **33 countries**.

Our teams have brought cable transportation to new heights through their vision, their will to succeed and their energy to reach new horizons and summits. The cable is also **a symbol** of the strong and durable connection between the world's populations, cultures and regions. POMA has become a major player in safe and eco-friendly transportation, where sustainable development is the watchword.

POMA has subsidiaries in the US, Switzerland, China, Korea, Vietnam, Russia and Columbia. But the company remains a **staunch advocate of Made in France**, with our production sites based in the French Auvergne-Rhône-Alpes region.





Integrated, high-performing

INDUSTRIAL SYSTEMS

A DEMAND-RESPONSIVE ORGANISATION

To produce high-performance equipment at competitive costs with ever-tightening lead times: these are the objectives pursued by POMA. By integrating new digital uses and cutting-edge technologies into its production methods and prioritising operational drivers such as skills centralisation, innovation and customer focus, the Group has optimised both its industrial base and its entire value chain.

POMA and its 4 industrial subsidiaries located in the Group's cradle Auvergne-Rhône-Alpes engineer the sites for optimal management of operations, engineering, manufacturing, assembly and installation. POMA has overall control over cable transport projects, including design engineering; SACMI manages production and pre-assembly of mechanical subsystems; SEM-ER manufactures industrial electrical equipment and automation; SIGMA designs and manufactures cabins; and

COMAG oversees on-site installation and maintenance of equipment.

Since its installation in Gilly-sur-Isère in 2017, performance at the new POMA industrial site has been on target with the Group's ambitions. This success is in particular due to the consolidation of a large part of the Group's production activities at a single site, the significant investment in advanced machinery and technologies and the new work organisation put into place.

NEW BUILDINGS FOR NEW ACTIVITIES

Due to the strong increase in the Group's international activities and growing demand in sectors such as mountains, tourism, industry and urban mobility, POMA is investing in an additional 30% surface area to expand its operations at the Gilly-sur-lsère site. Thus, in addition to the 7 hectares used for industrial activities, new 6,000 sq. m buildings will reinforce SACMI's and COMAG's production capacities.

Since beginning operations in 2017, the number of employees has increased by 20%, and the HR plan foresees further growth. "Growth drives our business, but our growth is driven by our teams," says Jean Souchal, Chairman of the POMA Board.

Indeed, the teams have already welcomed new apprentices, whose side-by-side working with expert employees guarantees a valuable transmission of knowledge. While the challenge naturally remains to improve performance, it is just as strategic to afford oneself the means to retain occupational knowhow internally: engineering, mechanized welding and the machining of large structures. Therefore, POMA capitalises on its know-how by continuing to train its teams and by recruiting talent to operate the innovative processes of tomorrow.

POMA will thus invest €40 million as part of the modernisation plan for its industrial facilities. The "Group's largest plant" has already welcomed about a hundred visiting delegations and enthusiastic customers who have (re) discovered the importance attributed to process quality and user safety.



The realms

OF CABLE TRANSPORTATION



/ > snow

POMA has been a pioneer in cable transportation solutions since 1936. The inventor of the fixed-grip surface lift and the first detachable grip has been providing skiers with smooth and sustainable mobility in the heart of the snowy mountains for over 80 years.

POMA ascends the summits of mountain ranges with its sleek, high-performing ski lifts. POMA lifts are fast, quiet, energy-efficient and comfortable, blending in seamlessly with the natural environment.

Last winter, the Group inaugurated numerous installations, most notably in the French Alps. Detachable chair lifts offering more safety and comfort have been installed in Méribel, Serre-Chevalier, La Plagne, Valmorel, Châtel and Foux D'Allos, and premium gondola lifts, such as those found in La Daille in Val d'Isère, Les Brévières in Tignes and Les Grangettes in Courchevel, have also been put into service this season. Well aware of their current challenges. POMA helps resorts to develop through solutions linking ski areas and valleys, thus combining both soft mobility and tourism. In the Pyrenees, for example, a 3 km-long gondola lift with a 600 m vertical drop makes it possible to travel

between Loudenvielle and Pevragudes in 10 minutes in all seasons, offering new economic opportunities. The Alpe Express, inaugurated this winter at Alpe d'Huez, is another perfect example of peri-urban transport to connect the village to the resort. In Georgia, three new detachable 10-seater chair lifts connect the city of Kobi with the ski resort of Gudauri, reducing travel time while avoiding a mountain pass at 2,400 metres altitude. POMA thereby reaffirms its position as a committed partner and sets the stage for the mountain tourism of tomorrow: a pleasant and welcoming experience that caters to the comfort of mountain travellers and enthusiasts alike while also respecting the environment.

> URBAN AREAS

Whether you need to climb a slope or reach a cut-off part of the city, cable transportation is the ideal solution, opening up new possibilities wherever people need to keep moving, all in a durable, environmentally-friendly, comfortable and energy-efficient way. Link an island to a megalopolis, travel on an air cushion between airport terminals, connect suburban districts to

the city centre, fly over a river, ascend to the top of a mountain, reduce traffic congestion, replace a road, a bus line, a ferry... the possibilities are endless! From New York (USA) to Medellin (Colombia), POMA is establishing ropeways as the new means of public transport in urban areas and reducing the impact of transportation on the environment.

Many cities in France have turned to POMA to help them embark on their urban mobility revolution.

Toulouse will soon start its €93 million project, 30% of which has been earmarked for maintenance over 20 years. For the first Metrocable on Réunion, the CINOR chose to subcontract both operation and maintenance for a period of 5 years. This part of the contract represents €1 million of the total €55 million awarded. In Medellin (Colombia), the sixth Metrocable, in the process of being finalised, will be the first 12-seater urban gondola lift in the world, carrying 4,000 people per hour to the city centre. In Santo Domingo (Dominican Republic), POMA inaugurated the first urban cable car in the Caribbean. Meanwhile, work on the «Aerovia» line, a full-fledged aerial tramway line in Guayaquil (Ecuador), is currently under way.





> TOURISM

The 8-seater "Beauval Cloud" gondola lift connects two remote areas in the prestigious 40-hectare ZooParc. Rising to the mobility challenge to facilitate travel and improve visitor comfort, particularly for people with reduced mobility, the 24 cabins are equipped with panoramic windows and glass floors for unforgettable sensations. Beauval has become the first French animal park to install cable transport.

In Zhuhai, China, POMA has achieved a world first: 3 interconnected tri-cable detachable cable car systems with the highest throughput in the world. More than 4,539 km long, the installation represents a one-of-a-kind configuration for its number of vehicles in line, its stations forming the famous triangle named after Chimelong and in addition an exceptional lighting system. Signed Pininfarina, this unique attraction will offer a unique view of Macao and its bay. In Lianshi, in the province of Ghizou, POMA is supporting the city's economic transformation via the "Meihuashan Lift": a 10 km gondola lift connecting the former mining town to the mountains with up to 1,500 passengers per hour. At the intermediate station, visitors can enjoy the panoramic restaurant. The second section leads them to the resort's ski area, hotels and shops. New leisure activities lie within just

minutes reach of the city!

In India, the Patnitop project in in the Jammu and Kashmir state presents Skyview, the site's new attraction. This gondola lift takes visitors on a journey through the pine forests to the restaurant. Opening will take place in 2019.

SCIENCE & INDUSTRY

New technology research centres, large-scale engineering structures, gold and mineral mines and some of the most impressive hydro-electric dams in the world take full advantage of our technology, withstanding some of the most extreme conditions in the world. POMA designs and installs high-tech cabins and funicular railways, high-performance cable cranes and Flyingbelts® (suspended conveyor belts). Ropeways are becoming the go-to eco-friendly and cost-effective alternative to cumbersome lorries that clog up operations.

✓ ➤ MINIMETRO®

Cincinnati, Detroit, Miami, Frankfurt, Perugia, Zurich, and Cairo have all opted for this comfortable, reliable and eco-friendly transportation. Drawing on several decades of experience in the cable car industry, POMA has become the world-wide leader in urban cable transportation thanks to the MiniMetro® system. The POMA MiniMetro® at the Cairo International Airport has revolutionised the world of transportation through the carrier's air cushion technology, also known as Air Levitation Technology.

This innovative system has proven to be one of the best solutions in smooth mobility. Fewer vibrations and reduced noise ensure optimal comfort for passengers.

Our technology makes it possible for the carrier to slide along the track with almost no friction, reducing energy consumption during the trip.

> ENTERTAINMENT

The POMA Group is a shining star in the entertainment sector. Poma combines passion and innovation to provide passengers with thrilling experiences. POMA designed the cabins for the world's largest observation wheel.

Reaching 168 metres, the High Roller has become the main attraction of the City of Lights. POMA drew on exceptionally efficient cooperation and coordination with subsidiaries to design, manufacture and install the 28 panoramic, customised, spherical cabins.

Each capsule is equipped with 8 TV screens and can carry 40 passengers for a 45-minute ride over the dreamlike Las Vegas skyline.

In 2016, the POMA Group built the highest observation tower in the world in Brighton, Great Britain, reaching a height of 138 metres. POMA designed and built the entire "pod and drive" system, including the immense 200-person capacity panoramic observation cabin and all the parts used to raise and lower the cabin up and down the tower like a vertical gondola.

In 2019, POMA is undertaking two major big wheel projects: in Shenzhen (China), a 130-metre wheel and in Dubai (United Arab Emirates), the largest wheel in the world with 48 cabins and measuring 250 metres!



PARIS, FRANCE KYAIKTIYO, BURMA ELBRUS, RUSSIA

FRENCH EXCELLENCE

present throughout the world

Throughout the globe, POMA has demonstrated its knowledge and expertise in cable transportation. The company innovates around the world to provide users with stunning, never-before-seen views of major sites.

POMA achieves 80% of its turnover internationally and has designed and built over 8,000 installations around the world.

Our multitude of transit solutions — surface lifts, chair lifts, gondolas, aerial tramways, funicular railways, inclined lifts, the MiniMetro®, etc. — provide users with the very latest in ropeway technology. The POMA Group has a presence in 90 countries through its 15 subsidiaries, including LEITNER POMA of America - responsible for the North America and Oceania market - POMA Beijing - which oversees the Chinese market - POMA Columbia for the Latin America market ex-Brazil, POMA Brazil for the Brazilian market, POMA Russia - responsible for the Russian market and the CIS area - and BACO, which is in charge of the Swiss market and manages the Swiss offices on a sporadic basis.

POMA is also involved in the major ski resort modernisation programmes in China, for example at Yabuli and Cuiyunshan, and in Russia at the Arkhyz resort where the company, after equipping the southern slope with several devices, has delivered an impressive 10-place Diamond gondola lift measuring 3.8 km over 3 sections. As a new link inside of the resort taking visitors to a final altitude of 2,505 m, it opens up access to new trails ski resorts of Veduchi (Chechnya) and Mestia is currently nearing completion.

(Georgia) to create sustainable business models. POMA supports major tourism development proiects in India, for example, where the French company is preparing to install an approximately 5.5 km passenger ropeway system, which will connect two well-known mountain towns in northern India. In China, following its first success in Chimelong, POMA has once again been selected to supply 3 interconnected tri-cable detachable cable car systems to Ocean Kingdom. With its stations forming the famous triangle named after Chimelong and its unique view over Macao and its bay, the extraordinary installation is on the way to becoming a worldwide reference.

Also in China, POMA has built a 10 km elevator in Lianshi called "Meihuashan Lift", which forms the core of a tourist project linking the former mining town with the mountains and carries 1,500 passengers per hour. In Serbia, as part of a major tourism project, POMA is supporting the construction of the world's longest panoramic gondola lift (9 km in 25 min) linking the city of Zlatibor to the resort of the same name.

POMA, which has never hesitated to diversify, devotes nearly 60% of its business to urban transport. From Latin America where the company is building the 6th Metrocable line, the P line, in Medellin, Colombia: or Santo Domingo, Dominican Republic and Guayaguil, Ecuador; to Reunion, where it is building the Indian Ocean's first Metrocable in Saint-Denis, in snow-covered valleys and forests. The company projects are developing on every continent. Africa helps upgrade cable transportation equipment at is no exception: two lines have been inaugurated in the most popular ski resorts in the United States. Algeria in Bab-el-Oued and Tlemcen, while in Egypt Further to the east, POMA is helping the budding a tourism project on the site of the new Galala City



PRODUCT AND SERVICE **INNOVATIONS**

POMA works with and for its customers to produce innovations that help the company showcase its technological prowess, with cutting-edge solutions that promote the strength of cable transportation. The company has won several innovation awards and files numerous patents each year.

At POMA, innovations are shared and maintained throughout all of the Group's activities and subsidiaries. The R&D department comprises around thirty people who regularly meet with and listen to operators on the ground in order to provide them with day-to-day support.



NEW DIRECTORIVE, AN ETHICAL ENGINE

POMA has redesigned its DirectDrive system - launched in 2014 - to produce an ever quieter drive system based on waste-heat recovery. POMA has improved the DirectDrive system's ventilation, helping to further reduce noise and offer even better comfort to passengers, operators, and maintenance operators.

The result? - 8% energy consumption -15 decibels. This is a major asset for cities looking for that ideal combination of eco-responsibility and passenger well-being. DirectDrive systems have been installed at a growing rate over the last 5 years, increasing from the 30 systems that initially showcased the technology in 2013, to 188 systems in 2018. And they've been installed throughout the world: Oruro in Bolivia, Chimelong in China, Zacatecas in Mexico, Santo-Domingo in the Dominican Republic, and soon Saint-Denis on Réunion.

NEW SMART BOARD, A NEXT-GEN **DRIVING STATION**

The new smart board is designed to be built in underneath the premise's bay window for visualising the different areas for surveillance while optimising available space.

The control system has been simplified and navigation through the information screen made easier. The 2 control touch screens rotate 180°, allowing them to even be used

The first screen, used to control the aerial lift, supports the interface of the driving station, the steering modes, and all of the setting and variables statuses for the lift's components (by location or function). It provides access to the pre-recorded periodical guick tests, the ZenIS load simulator and the EcoDRIVE mode, among others.

The second screen is dedicated to the operation and maintenance support functions. It can be used to access the advanced features of the COPILOT and HyperView software, as well as the TimeLINE mode.

→ UPILOT® AND COPILOT: TWO DIGITAL TOOLS

POMA has developed two digital tools specifically designed for use by ropeway system operators: UPILOT® and COPILOT, designed specially for the skiing, tourism, urban and industrial sectors. These tools fully meet the

expectations of operators, maintenance workers and future system drivers. UPILOT® and COPILOT help POMA provide ever more dedicated support to cable transportation system operators.

OPERATION AND MAINTENANCE: ALWAYS STRIVING TO GO FURTHER

For our local and international clients, POMA provides maintenance and operation contracts to oversee the continuous operation of our installations every day of the year. Depending on the customer's needs, we also recruit, train and provide teams dedicated 100% to the maintenance of our installations. In order to adequately respond to the growing operational and maintenance needs of the increasingly sophisticated equipment we build, POMA has created a new service: maintenance engineering.

POMA has developed a unique, client-centric approach to engineering, operation and maintenance. The company supports its customers with their operation and maintenance needs, helping them to manage costs while ensuring quality and sustainability. Customer requirements vary from operation staff skills transfer and support to help with becoming operators themselves. The analysis of maintenance monitoring permits precise definition of the best maintenance policies for the installation, from preventive and predictive maintenance with vibration analysis systems, to drafting maintenance plans adapted to each piece of equipment and providing data for the computer maintenance management software (CMMS).

These a la carte operation and maintenance contracts help guarantee the maximum availability of any type of urban installation, 20 hours per day all year round, with an optimised maintenance timeframe.

Drawing on its expertise in interface management, POMA also develops clusters whose form, size and timeframe are unique to each project.

These clusters have one objective: the transfer of operation and maintenance skills. For the first urban 3S chairlift in Toulouse, POMA partnered up with BOUYGUES TPRF and SYSTRA, with Séquences for the construction, as well as with ALTISERVICE - a subsidiary of ENGIE - the 1st ski resort operator in the Pyrenees.



Based on three years of research and development, the UPILOT® system is divided into two independent but complementary

solutions to help users learn the different operating and safety procedures of the ropeway. It provides a fully immersive work and training space that recreates operation conditions in real time in order to help users learn the device's different operating and safety procedures. The user can learn to use the device in a risk-free environment, helping them to acquire the necessary skills more quickly and safely.

The user can even move around the environment to perform the necessary operations and handling techniques. With UPILOT $^{\tiny{\circledR}}$, it is now possible to train operating and maintenance personnel before they even get to operate the device, while allowing trained staff to upgrade the skills they already have.

The operator can also manage costs (related to training, etc.) more effectively. UPILOT® also allows you to monitor how long it takes to train and test new users. This tool can be used independently by the company's internal instructors via a specific training course. UPILOT®: a flexible and cost-effective tool for cable transport operators.



COPILOT is the latest digital tool developed by POMA. This intelligent operating and management system is a web and

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iPad compatible application that allows you to find the right information at the right time, in order to operate and maintain ropeways securely, thus maintaining a high availability rate.

In concrete terms, through COPILOT, POMA provides users with all the technical documentation relating to the equipment concerned, such as drawings, instructions and electrical diagrams. COPILOT is synchronised in real time with POMA's internal management system, allowing users to view the latest information.

Updates featuring feedback from operators help to regularly enhance the tool.

Acting as a multilingual database that can be consulted both on and offline, COPILOT's unique feature is its ease of use, with each user choosing their own browsing mode, map data, location, features and text searching mode

The "favourites" provide instant access to regularly consulted content. For some equipment you can even select the parts to be replaced and place them in a basket for an instant quote! Simple and ergonomic, COPILOT is the by far the most advanced operation and management system on the market.





POMA in numbers

Turnover: 450 M€

1,113 employees with 680 in France

Export: **80%** of turnover

Snow: **40%** of turnover

Tourism / urban activity: **60%** of turnover

Number of worldwide installations: **over 8,000**

Presence around the world: in over 90 countries

More than 6.5 million people transported worldwide every hour

100% of POMA France industrial sites based in Auvergne-Rhône-Alpes

In order to take its actions as a responsible company even further, together with the women and men of the company, POMA chose to create the POMA Foundation. Operational as of late spring 2019, the POMA Foundation will support solidarity-related projects and missions in the field in the area of Mobility. The idea is take action by creating links with environmental, solidarity, disability and sports issues, in France and around the world.

"POMA has a clear societal role, and has been fulfilling its mission for many years. It will continue to fulfil this mission by sharing the convictions and values it holds on how best to construct the world around us. We want to further strengthen this responsible corporate action with the men and women who make up POMA, and we have decided to make further progress

by creating the POMA Foundation to help us move forward. Uniting and bringing together employees around values of solidarity seemed an obvious and important step for us to take. This is why we have initiated a collaborative process within POMA to bring together all volunteer partners who wish to participate in the development and actions of the Foundation," says Jean Souchal, Chairman of the Board.

POMA ALREADY SUPPORTS INITIATIVES IN MEDELLIN, COLOMBIA

POMA has provided support to several organisations in Medellín over the last five years, with projects on mobility and solidarity creating genuine collaboration with the residents of districts

where the METROCABLE gondola lifts are built.

POMA Colombia has hired a Colombian collaborator who has close ties to neighbourhood organisations. She is the indispensable and precious link between the company and the inhabitants. In 2004, POMA built the first urban ropeway transportation network in Medellín, a city of 3.7 million inhabitants. Fourteen years after its launch, the network enjoys continuing success and every month over 1 million passengers use the POMA METROCABLE gondola lifts. In 2013, Medellín was named the World's most innovative city.

POMA has become the major player of cable transportation.



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