



Automated People Movers

Mobility solutions and services



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Integral solutions geared to specific needs



Markus Schrentewein
CEO of Doppelmayr Cable Car GmbH

»Our customers are extremely satisfied with our APM systems. We can guarantee high-quality implementation and maximum lifecycle thanks to the know-how and sophisticated service and maintenance capabilities of Doppelmayr.«

From concept to implementation:
We are able to fulfill your vision.



From development and planning to operations and maintenance (O&M), Doppelmayr serves as a comprehensive partner for rope-propelled transport solutions and operations services. The Cable Liner®, our Automated People Mover (APM) in the premium segment, is a trusted and proven system designed for distances typically up to 6 km (3.7 miles). The rope-propelled and rail-based system is renowned as one of the safest mobility solutions worldwide.

Everything from a single source

In cooperation with highly qualified subcontractors, we make your vision come true.

We achieve this by means of highly flexible system solutions and many years of experience. Having concluded the project management and implementation phases, we will continue to support you to the desired extent. Our expert team assists you with comprehensive advice, spare part deliveries, and maintenance works. For additional services, we offer O&M contracts, where we take care of the overall system operation and maintenance, helping you to achieve the highest possible passenger safety and satisfaction.

With Doppelmayr at your side, you benefit on multiple levels:

- Reliable partner with decades of experience
- Proven rope-propelled technology
- Comprehensive services from implementation to O&M
- Design custom-tailored to your needs
- International quality management, environment, and safety standards

Our service commitment

Project Development

Planning & Design

Manufacturing & Procurement

Project Management

Installation & Acceptance

Operations & Maintenance





Hamad International Airport Passenger Train

Doha, Qatar

Qatar Company for Airports Operation
and Management W.L.L. (customer)

Operated by Doppelmayr

Propulsion concept:

Low noise emissions

No air pollution

No local CO₂ output



Products and services at their best

Hamad International Airport Passenger Train

Silent, beautiful, and efficient – the glass-roofed trains glide through the interior of the terminal at Hamad International Airport (HIA), one of the biggest and busiest hubs in the Middle East. The customized walk-through train design beautifully complements the surrounding environment and architecture. The propulsion concept of the silent indoor system was one of the customer's key selection criteria for the open terminal building.

Rubber-tired vehicles with air suspensions guarantee utmost travel comfort. Next to ambitious and futuristic design, there are various benefits like high reliability, as well as barrier-free access. In addition to the implementation of the APM project, the airport also benefits from a full service package, with Doppelmayr managing the operation and maintenance services onsite.

Double Shuttle

772 m (2,533 ft)
Length

6,300 p/h/d
System capacity

45 km/h (27.9 mph)
Operating speed



Why you should opt for a Cable Liner®

Our APM is an efficient and innovative passenger transit solution used at airports and in urban applications.



6 km

Max. length



54 km/h

Max. speed

The system is designed for operation during extreme weather conditions with high wind speeds and sub-zero temperatures. The innovative drive concept was developed over decades and has proven to be highly durable. All APMs operate in a fully automatic mode and are supervised from a central control room. Compared to other people movers, the Cable Liner® system is not only environmentally friendly but also cost-effective.

Why cost-effective?
Lighter trains mean lighter and less expensive guideway structures. Small support towers and foundations reduce the overall investment costs. Furthermore, light trains have a lower power consumption. The fully automated system allows for operation and maintenance with less personnel. Efficient construction and maintenance procedures result in low total costs of ownership.



System capacity:
The barrier-free access makes it easy to handle large numbers of passengers. The system capacity depends on the track length, vehicle size, and the chosen solution.

High
Capacity

The passenger experience

Comfortable, safe, and reliable.

Customers and passengers worldwide enjoy the benefits of high reliability and the travel comfort of the noise-reduced APMs. Moreover, the barrier-free design enables smooth access. The elevated guideway gives passengers a great view of the surroundings, making the ride an unforgettable experience.

Safe system solution:
With the proper handling and maintenance, we can guarantee maximum safety in passenger transport. In case of emergency, there are unique evacuation procedures available. All systems are compliant with the highest level of international codes and standards.



24/7/365
Max. operating performance

A wide range of applications

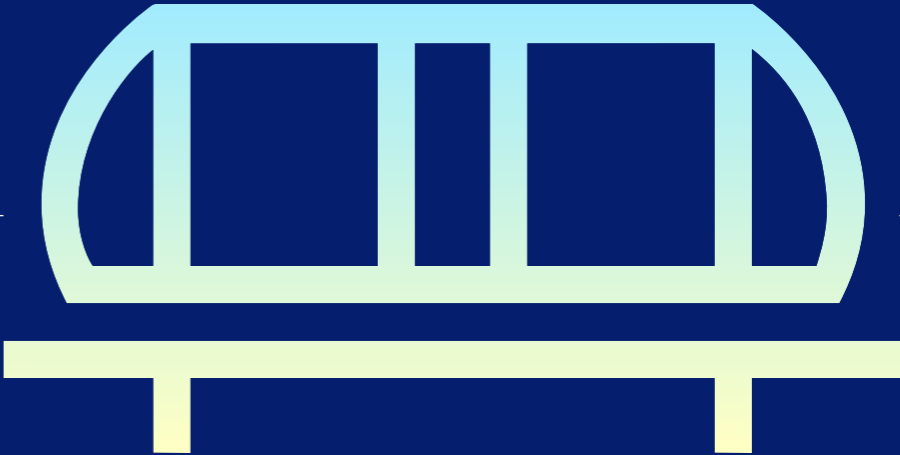
Airports

Amusement Parks

Public Transport

Urban Areas

Resorts



The APM system can be integrated into a variety of environments. It is often used as an airport shuttle, taking passengers to the airport from a parking facility or public transportation connection, as well as through the airport from one terminal to the next.

Thanks to the system's flexibility, it can be easily integrated into the existing urban infrastructure. Moreover, the technology is ideally suited to close gaps in the public transportation network, allowing travelers to conveniently get to their destination.

Solutions in unique environments



People Mover Venezia

Venice, Italy

As a fully integrated element of the public transportation network, the elevated and environmentally friendly system from Doppelmayr brings passengers right into the heart of the city.



Air-Rail Link

Birmingham International Airport, United Kingdom

As part of a political initiative to increase the use of public transportation, the airport created a link to the existing public transportation facilities with the Air-Rail Link system.



Cabletren Bolivariano

Caracas, Venezuela

The intermodal transport system links city areas, provides high travel comfort for passengers, and represents a significant improvement for the urban area and entire population of Caracas.



References



Mandalay Bay Tram

Las Vegas, USA

The Mandalay Bay Tram in Las Vegas is the first Cable Liner® built by Doppelmayr. The customized design of the distinctive-looking trains matches the pyramid at the Luxor hotel. A perfect example for resorts and amusement parks.



Terminal Link

Toronto Pearson International Airport, Canada

In Toronto, two trains operate in shuttle mode between two terminals and a large parking facility. Efficient passenger logistics make travel quick and easy.



Explore further projects



System benefits



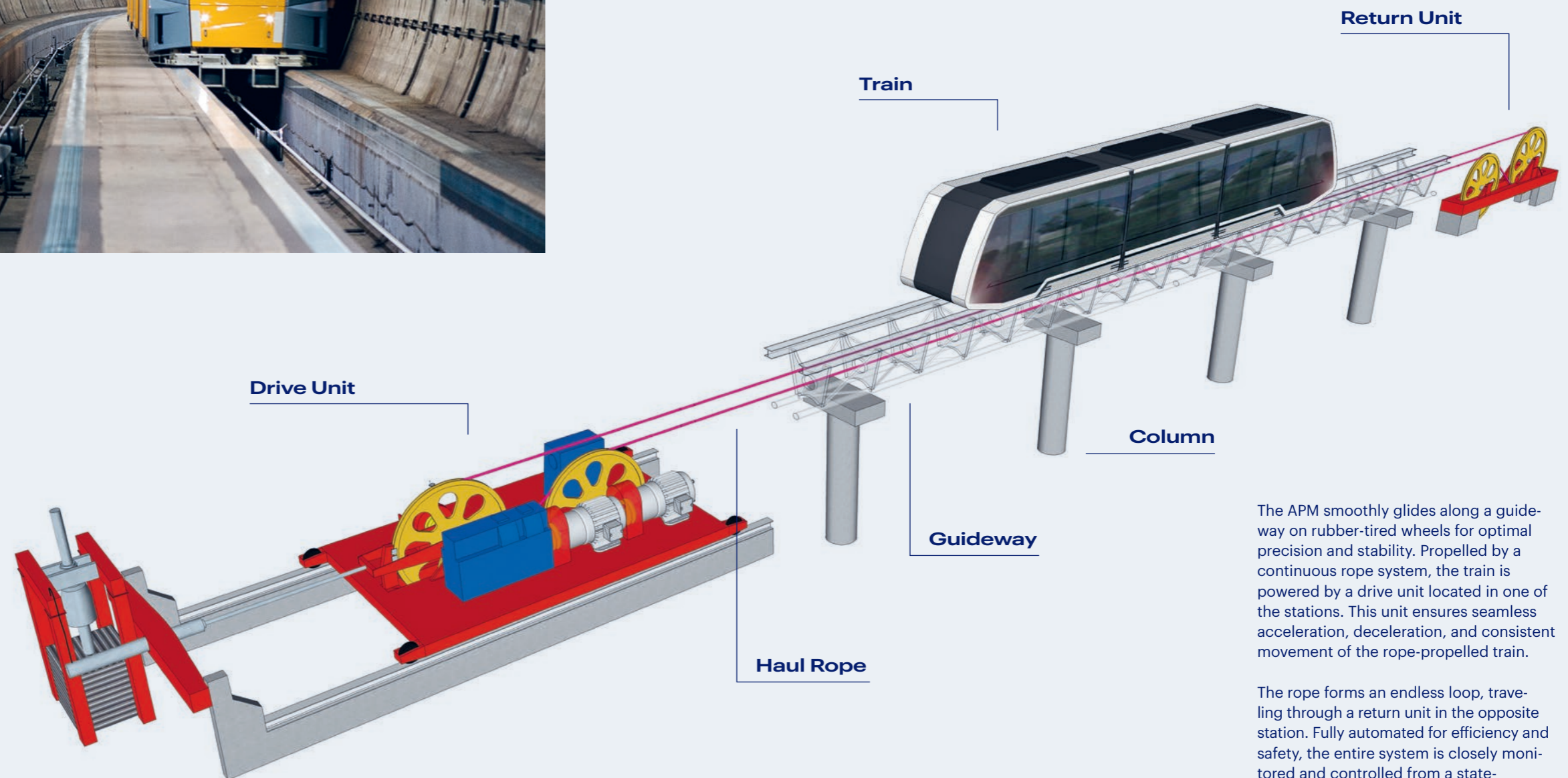
- Fully automated system
- Reliable & weather-proof
- Cost-effective
- Custom-tailored design
- Zero local emissions
- Low noise & vibration
- Barrier-free access
- Highly comfortable travel experience
- Easy integration into existing infrastructure

Perfectly integrated

...into the existing infrastructure.

With know-how and hands-on experience, we can implement APM systems even in challenging surroundings. Elevated or underground guideway solutions can reduce intrusions into the existing environment and nature. The system's adaptability and sophistication allow it to be used both inside and outside.

How the system works



The APM smoothly glides along a guideway on rubber-tired wheels for optimal precision and stability. Propelled by a continuous rope system, the train is powered by a drive unit located in one of the stations. This unit ensures seamless acceleration, deceleration, and consistent movement of the rope-propelled train.

The rope forms an endless loop, traveling through a return unit in the opposite station. Fully automated for efficiency and safety, the entire system is closely monitored and controlled from a state-of-the-art Central Control Room (CCR).

Guideway options

The Cable Liner® offers a range of customizable options: Single Shuttle, Double Shuttle, Bypass, and Pinched Loop. Each solution is tailored to meet the unique needs of our customers, taking local infrastructure and environmental factors into account.



Single Shuttle

The Single Shuttle is the simplest APM configuration, featuring a single train traveling back and forth on a single guideway. This setup is ideal for routes up to 3 km (2 miles) with 2 to 5 stations, providing an efficient solution for medium passenger capacities.



Bypass

The Bypass configuration provides a cost-effective solution by allowing two trains to share a guideway up to a certain point. Movable switches direct the trains onto separate tracks, enabling them to pass each other without interruption.



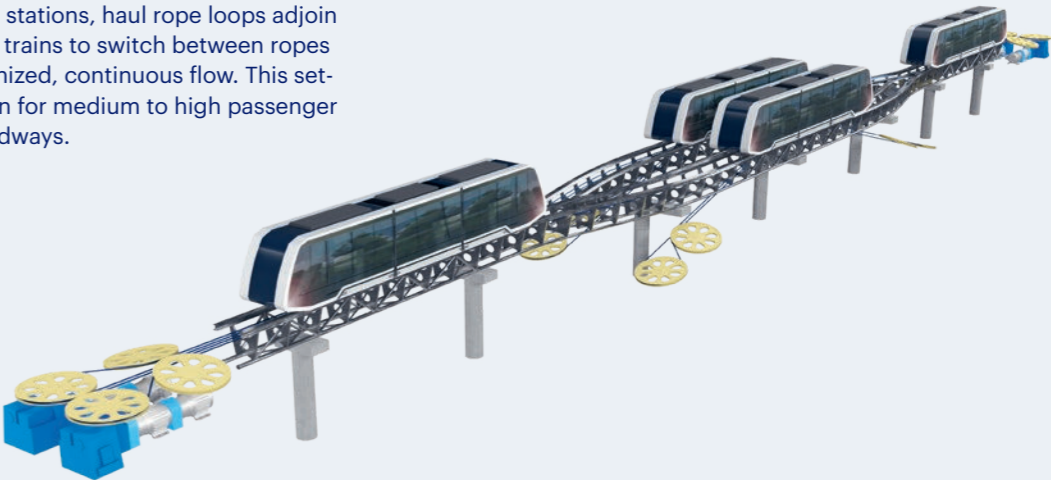
Double Shuttle

The Double Shuttle features two trains operating side by side on parallel guideways. Each train has its own dedicated guideway, haul rope, and drive machinery. This configuration is ideal for medium to high passenger capacities and moderate to high service frequencies.



Pinched Loop

The Pinched Loop configuration minimizes headway times by enabling the simultaneous operation of multiple trains. At the stations, haul rope loops adjoin and overlap, allowing trains to switch between ropes and create a synchronized, continuous flow. This set-up is the ideal solution for medium to high passenger capacity and low headways.



Direct air-to-rail connection

Luton DART at London Luton Airport

The Luton Direct Air-Rail Transit (DART) bridges the gap between London Luton Airport and the Luton Airport Parkway railway station. To enhance the overall travel experience, the system offers a fast

and environmentally friendly connection to the airport. Thanks to the competent onsite O&M team of Doppelmayr, the system operation meets the highest requirements in terms of safety, availability, and quality.



- Direct air-to-rail connection
- Sustainable and energy-efficient
- Travel from the rail station to the airport in only three minutes
- Doppelmayr O&M Service

Double Shuttle

2,080 m (6,824 ft)
Length

2,720 p/h/d
System capacity

50 km/h (31 mph)
Operating speed



»The impact of the Luton DART goes beyond the enhanced ease and convenience for passengers. It is also instrumental in our plans for the future sustainable growth of the airport, encouraging passengers away from their cars and onto public transport.«

Nick Platts
Managing Director of Luton Rising



The next level of service

Are you looking for a dependable partner for safe and reliable operation? In this case, we have the solution for you – an Operations Services contract with Doppelmayr.

For decades, Doppelmayr has been successfully operating rope-propelled systems to the complete satisfaction of our customers. The scope of service and the business model are tailored to meet all your needs. In addition to operation and maintenance, we offer various ancillary services such as customer experience services, fixed facility management, marketing, landscaping, or ticket management.

All of our worldwide operating sites are part of a unique network of knowledge and know-how, supported by our professional integrated management system. This facilitates seamless mobilization and optimized delivery of all services throughout the entire lifecycle.

Our experienced and professionally trained onsite teams use this know-how to guarantee smooth and efficient operation and to unlock the next level of service. We make the vision of your system a reality, letting you focus on your core business.



- Making your vision for passenger transport service a reality
- Professional Integrated Management System (IMS)
- Maximum reliability and availability with services up to 24/7/365
- One global network of shared competencies, practices, and know-how
- One single and transparent fee
- From conception to passenger service – everything from a single source



More Information

