



The Electric Monorail System



The Electric Monorail System: rail-based precision

▷ 1

If you're looking for a versatile conveying system that can be adapted for use in even the most demanding conditions, the Schierholz Electric Monorail System (EMS) offers you the perfect solution for a wide range of applications. It can be adapted for use in any flow rate/material flow or line management system and can even be combined with other conveying systems. Its modular design makes the EMS extremely versatile in terms of route and control options. This system provides you with maximum functionality in your internal transport, storage and sorting material flows.



▷ 2

The beauty is in the detail

The EMS boasts exceptional operational availability, thanks primarily to the autonomy of the individual vehicles and the resulting redundancy of the conveying system. Equipped with a three-phase motor and its own control options, each vehicle is conveyed along a standardised, tried-and-tested rail design in accordance with the C1 standard. For this type of rail design, individual loads should not exceed 1,500 kg.



▷ 3

Versatility in terms of vehicle speed and routing is achieved through the interplay of vehicle control options and the overarching process control system. This control concept, combined with a constant power supply to the vehicles, is responsible for both the optimised capacity of the conveying system and supplementary functions such as gripping, lifting and rotating.

The ultimate in precision: down to the millimetre and second

The high-speed Schierholz EMS transports your materials quietly, effectively and reliably, and can cope with inclines of up to 90° without the need for chains or gear racks. Millimetre-precise positioning at loading, processing and unloading stations enables the use of robots. The EMS transports your goods with precision down to the second and with the necessary accuracy.



▷ 4

Perfectly integrated into your material flow logistics

Now you can solve all your material flow problems with our Electric Monorail System, as it can be seamlessly integrated into your flow rate/material flow logistics and interlinked with other production equipment for optimum performance. Optional functions such as lifting, rotating and gripping offer additional advantages, made possible by independent control systems and power supplies for each vehicle.



▷ 5

Maintenance is a thing of the past

Schierholz quality also means perfecting your production process, which includes maximum reliability and making maintenance a thing of the past – for greater efficiency that pays its way.

- 1 ▷ EMS rotating rail: rotates up to 360° to allow double-sided vehicle loading, used in the conveying systems are manufactured in-house.
- 2 ▷ Control cabinet production at Schierholz: all control units used in the conveying systems are manufactured in-house.
- 3 ▷ EMS in front of the warehouse: pallet return on gravity roller conveyors.
- 4 ▷ 3D image of all specialised components: EMS vertical conveyor for interlinking three EMS levels.
- 5 ▷ 90° inclines: replacing vertical lift in the car industry.



At a glance

▷ For customised applications

The Electric Monorail System (EMS) provides solutions for a whole range of applications and can be customised for use in any type of material flow or line management system. It can also be combined with other conveying systems, including those in demanding environments. Thanks to its modular design, it's exceptionally versatile in terms of route and control options.

▷ Quiet and precise down to the millimetre and second

The Schierholz EMS transports your materials to where they need to go – quietly, quickly, reliably and with maximum precision.

▷ High speeds

On straight routes, vehicles can travel at speeds of up to 120 m/min. The faster they move, the fewer vehicles the system requires, which makes the overall system much more cost-effective.

▷ Inclines of up to 90°

Depending on the geometry and weight of the materials, the Schierholz EMS can cope with inclines of up to 90° without the need for any additional equipment, such as chains or gear racks. This ensures a consistent flow level and makes purchasing expensive, elaborate lifting gears unnecessary.

