



# The LEITNER Grip-Coupling System

Certified safety for the station exit

#### Basis

In its fundamental requirements, the EU ropeway directive specifies that with detachable systems, it must by all means be prevented that a falsely coupled vehicle leaves the station exit.

### Description

When full travelling speed is almost reached right in front of the station exit, an abrupt, sudden stop of the vehicle prevents a crash but still has no less hazardous effects on the passengers or on the vehicle.

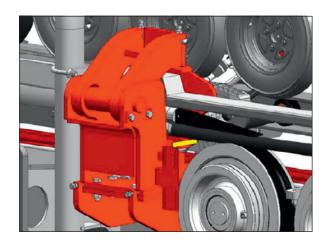
Therefore, the LEITNER grip-coupling system, which was already patented in 2005, prevents false couplings altogether. In the coupling area, the rope and grip guidance as well as the grip mechanism are constructively designed in a way that reliable coupling of the LEITNER grip can be guaranteed at all times, even in extreme cases such as:

- Breakage or damaging of rope guidance rollers in the station
- Derailment of the rope at the first tower from the station
- Ice or other obstacles on the guidance rail
- Breakage or wear of the grip operating elements as well as the grip running wheels

The complete coupling process is monitored in the highest electrical requirement class (AK4) and therefore achieves a maximum level of safety.



## **TECHNICALINFO**



#### **Benefits**

The grip-coupling system, which is certified by (the German Technical Inspection Association) TÜV-Süd, allows the **omittance of the horizontal safety area** after the station exit, which is otherwise mandatory according to EN 12929-1. This allows for a **significantly better** and **lower rope guidance** within the critical area close to the top station.

In 2006, the LEITNER company received the **world's first permission** to build a system without safety area!

Therefore, stations equipped with the LEITNER gripcoupling system can be **installed even at exposed sites** where, up until recently, construction was deemed not possible because of the requirement of a horizontal safety area.

A lower guidance of the rope close to the station leads to lower tower heights and less costs for ropeway and infrastructure components. The low guidance of the rope just before the chairlift reaches the deboarding area definitively has a positive psychological effect (less anxiety) on the ropeway passenger.

