



The LEITNER Grip-Coupling System

Certified safety for station exits

The EU Ropeway Directive stipulates in its basic requirements that a wrongly coupled vehicle must be prevented from leaving the station in a detachable system.

Stopping a vehicle abruptly just before the station exit at almost full speed may prevent a fall, but it can be just as dangerous for passengers in or on the vehicle.

The LEITNER grip coupling system, which was patented in 2005, therefore prevents mis-coupling from happening in the first place. At the coupling point, the way the rope and grips are routed, and the way the grips activate, is such that the LEITNER grip always couples reliably, even in extreme cases such as:

- + breakage or damage to rope guide rollers in the station
- + rope derailment at the first tower before the station
- + ice or other objects in the guide rail
- + breakage or wear of the mechanisms in the grip and the grip running wheels

The entire coupling process is monitored at the highest electrical requirement class (AK4), thus ensuring the highest level of safety.

Our TÜV-Süd-certified grip coupling system dispenses with the need for the horizontal safety section after the station exit which is otherwise required under EN 12929-1. This significantly improves – and lowers – the routing of the rope in the critical area before the top station.

The world's first permit to build a ropeway without a safety section was issued to LEITNER in 2006. This means that stations with LEITNER grip coupling systems can be built in exposed locations which until recently were considered untenable due to the requirement for a horizontal safety section.

Lower rope routing before the station means lower towers and lower costs for ropeway and infrastructure components. Lower rope routing just before the deboarding area on chairlifts is also very beneficial psychologically, since it makes passengers less anxious.