Innovative Premiere: From 2027, the world's first aerial tramway with DirectDrive technology will connect Bolzano and San Genesio

LEITNER's new ropeway system creates a direct link from Bolzano to the high plateau in just six minutes of travel time.

With the contract signed on 30 December 2025, South Tyrolean Transport Structures Inc. (STA) has awarded the construction of the new aerial tramway from Bolzano to San Genesio to the consortium comprising of LEITNER, Unionbau and Elpo. The contract was signed by STA CEO Joachim Dejaco and Giorgio Pilotti, Head of Sales LEITNER Italy. The new installation, with an order volume of around 27 million euros, will link the provincial capital with the San Genesio plateau in just over six minutes. Two cabins, each with 45 seats, will run at 10-minute intervals at speeds of up to twelve meters per second. The transport capacity is between 270 and 350 people per hour, depending on the mode of operation. By slightly adjusting the route in the upper section, the mid-station that was originally planned can be omitted. In addition, the bottom station will be moved about four meters towards the road.

DirectDrive technology: Energy efficiency and low noise as key project features

Technically seen, the project is a milestone: it is the first time worldwide that an aerial tramway will be equipped with a DirectDrive. The Drive, known from detachable systems and funicular railways, is implemented as a bridge drive – completely without a gearbox, which increases the availability of the system. This reduces wear and tear and maintenance and enables energy-efficient operation. The use of DirectDrive significantly reduces energy consumption, and sound emissions drop considerably, as gear-related noises are eliminated. In addition, the engine room will be fitted with sound-absorbing panels to further minimize emissions – a key consideration within the sensitive context of surrounding residential areas. High operational safety is ensured by an integrated rescue system. In the event of a failure of the main drive, two independent emergency drive systems are available. This redundant concept guarantees safe evacuation of passengers.

The project also sets new standards when it comes to the design of the cabins. Panoramic cabins with more than 80 percent glass surface, in a new design are planned. Programmable dimming by means of polarization allows the transparency of the glass to be adjusted as required: when passing over residential areas, it automatically becomes opaque to prevent views into private spaces. Once the area has been passed, the glass returns to full transparency. The cabins are modular and can be adapted as needed from pure passenger transport to combined use – for example with bicycles.

The carriage also follows an innovative approach: the main components are milled from solid pieces, avoiding safety relevant welds. For the first time in an aerial tramway, carriage rollers with integrated generators are also used. The roller generator creates an additional, decentralized energy source and thus supports the power supply to the cabin. The new aerial tramway creates a high-performance, technically pioneering link between Bolzano and San Genesio. After the detailed design is completed, construction is scheduled to begin in the second half of the year, with commissioning planned for 2027.

Press contact:

LEITNER
Maurizio Todesco
Head of PR & Corporate Communications
Brennerstraße 34
I-39049 Sterzing (BZ)

Phone +39 0472 722115
Mobile +39 335 772229
maurizio.todesco@leitner.com

LEITNER
Maria Jäger
Marketing Communication
Michael-Seeber-Straße 1
6410 Telfs

Phone +43 (0)5262 621 21 3414
maria.jaeger@leitner.com