
ZURICH, SWITZERLAND, DECEMBER 21, 2017

Peak performance: ABB technology powers new cable car Zugspitze

Company's state-of-the-art motors and drives ensure safety and reliability on record-setting gondola system for Germany's highest mountain

Long queues waiting to ascend Germany's tallest mountain may now be history. And that is not the only thing historical about the new ABB-powered cable car system that opened today and can take as many as 580 passengers an hour to the Zugspitze, the Bavarian Alps peak that is Germany's highest.

The cableway breaks three world records for a pendular, or hanging, cable car system: at 127 meters, its steel column is the tallest, with 1,950 meters it overcomes the highest elevation difference and with a total run of 3,213 meters from base station to peak, it has the longest span.

The system replaces the 50-year-old Eibsee cableway and will help overcome the Eibsee's notoriously long waiting times by transporting nearly three times the number of passengers per hour.

Making the record-breaking new cableway feasible for the operator, Bayerische Zugspitzbahn Bergbahn AG, is an array of innovative technology from ABB, which has extensive experience solving transportation challenges in the Alps.

"In Switzerland, most cableways and chairlifts use ABB motors and drives," says Hans-Georg Krabbe, Chairman of the Board of ABB AG, Germany. "We are absolutely delighted to contribute to such a unique project in Germany, too."

Powerful twin-motor design

The demands posed by the Bayerische Zugspitzbahn for trouble-free operation and availability were particularly challenging, requiring a system capable of operating 365 days a year, regardless of wind and weather. In such a setting, safe and comfortable transport through the air depends on the perfect interplay of motors, drives and mechanics.

Pulling the gondolas such a long distance at steep gradients of as much as 104 percent (about 46°) and a speed of 10.6 meter per second requires significant power, which is supplied by two 800-KW three-phase AC motors from ABB that are housed in the cableway's Valley Station.

ABB's alpine legacy

Since the late 19th century, ABB has built a lasting reputation for safe, reliable and energy-efficient transportation in the alpine region.

In the case of the world-famous Jungfrau Railway, a 9-kilometer cog railway that began operation in 1912, ABB was responsible for the electrification that made the route possible. Today, ABB technologies still ensure that the Jungfrau Railway safely carries more than a million passengers a year – even during heavy snowfalls – to the Jungfraujoch, which at 3,454 meters above sea level is Europe's highest train station.

And the world's steepest funicular railway recently went into operation in Stoos in the Swiss Alps, a 1.7-kilometer route whose two 136-passenger cable cars are powered by high-efficiency electric motors designed and built by ABB. The company also supplied other key components for the system.

"Today, it is all about making advancements in terms of energy efficiency," says Ueli Spinner, Head of Sales, Key Accounts & Service ABB AG, Switzerland. "But also where support, maintenance and service are concerned, we are the preferred partners of cableway operators."

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids, serving customers in utilities, industry and transport & infrastructure globally. Continuing a more than 125-year history of innovation, ABB today is writing the future of industrial digitalization and driving the Energy and Fourth Industrial Revolutions. ABB operates in more than 100 countries with about 136,000 employees. www.abb.com

—

For more information, please contact:

Media Relations

Phone: +41 43 317 71 11

Email: media.relations@ch.abb.com

ABB Ltd

Affolternstrasse 44

8050 Zurich

Switzerland