



## **THE WORLD'S HIGHEST 3S GONDOLA LIFT ON THE KLEIN MATTERHORN**

First-class comfort and superior design at 3,883 m above sea level

The most spectacular ropeway project in the Swiss Alps is going according to plan. Up to winter 2018/2019, Leitner ropeways is building the world's highest 3S ropeway (tricable gondola lift) on the Klein Matterhorn, for Zermatt Bergbahnen. Despite the challenges of the extreme altitude, the first of three summers of building went very well.

The altitude and the terrain profile of this high alpine construction project call for painstaking planning, extensive preparations and very precise, careful work from everyone involved. Working in this environment is a particular challenge for the riggers. The air conditions at this altitude are a lot more stressful for the organism than in the valley, and the danger of crevasses requires particular caution. The weather conditions also make things more difficult. In September there was already a meter of snow and temperatures down to minus 12 degrees. "Despite extremely difficult environmental conditions, the very good cooperation among all the firms involved in the building enabled us to make substantial progress with the construction work. The execution of the biggest building project in our history is on course", says Markus Hasler, CEO of Zermatt Bergbahnen AG.

### **A ROPEWAY SYSTEM OF SUPERLATIVES**

The new ropeway invites superlatives in a number of respects. In the high alpine environment, it is heavily exposed to wind and weather. It also has to overcome great distances. Ideal conditions for a tricable gondola lift that is characterized by high wind stability, among other features. The highest 3S cableway in the world, at just under 4,000 meters altitude, will be up and running by winter 2018/2019. The state-of-the-art facility, with the efficient and low-emission DirectDrive system, will then complement the existing cableway over about eight kilometers of its length. It will provide an additional capacity of 2,000 people per hour and create the conditions for continuous ropeway operation. The 25 comfortable cabins were designed by renowned Italian design studio Pininfarina – known for its work on marques such as Ferrari and Maserati. The ropeway starts at the valley station at Trockener Steg at 2,939 meters, and travels along the Theodul glacier to the

---



Matterhorn glacier paradise (Klein Matterhorn) at 3,883 meters. This will bring a significant improvement to the connection between the skiing areas in Switzerland and Italy.

## **ASSEMBLY WORK AT THE VALLEY STATION, FIRST INSTALLATIONS FOR THE UPPER STATION**

The first construction phase in summer 2016 proceeded as scheduled, and important groundwork was completed. The assembly work for the valley station began in mid-October. Major works are required for the installation of the supports. Because of the steep, rocky terrain, workings must go very deep, up to 30 meters in places, in order to lay solid concrete foundations. About 440 cubic meters of concrete were laid for the four foundations and their footings. The first support was erected at the end of August, and support 2 is already under way. Work on support 3 will be started next summer. At the upper station, the excavation work was completed in August and work then started on pouring the concrete.

---