

Stoosbahn Schwyz (Switzerland)



Project description

The Stoosbahnen (cable cars) open up the car-free mountain village of Stoos, located in the heart of Switzerland at an altitude of 1,305 m above the sea level. The funicular railway from Schwyz to Stoos reopened in December 2017 after almost 14 years of planning, implementation and construction, and has set a new world record: the steepest funicular in the world with a maximum gradient of 110 % (=47 degrees). A hydraulic control system keeps the cable cars in a horizontal position at any time during the ride. The route also includes two bridges (total length: 265 m) and three tunnels (total length: 562 m) whose construction represented a special challenge not only for the structure itself but also in terms of safety for the workers. The travel time for about 750 m in height and almost 1,740 m in length takes between 3 and 5 minutes. 1,500 passengers (one way) per hour can be carried. The project is unique and a landmark engineering skill.

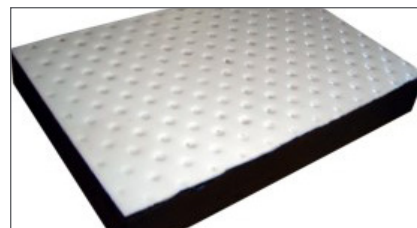
The Stoosbahn is located in the Canton of Schwyz leading to the mountain village Stoss



mageba scope

mageba delivered 36 LASTO®BLOCK bearings of Type E designed for maximum vertical loads of 100 to 330 kN. Due to the very limited space available and to keep the transmitted forces as low as possible, elastomeric sliding bearings were chosen instead of standart elastomeric bearings. The installed bearings of type E feature an additional steel plate vulcanised onto its upper surface into which is recessed a PTFE sheet.

Example picture of a LASTO®BLOCK bearing of Type E with PTFE sheet



Highlights & Facts

mageba Products:

Type: 36 LASTO®BLOCK Type E elastomeric bearings
Installation: 2017

Structure:

City: Stoos
Country: Switzerland
Type: Cable car
Length: 1,740 m
Completion: 2017
Owner: Stoosbahnen AG
Contractor: H. Wetter AG
Engineer: Slongo Röthlin Partner AG

Graphical description of the geographical facts of the Stoosbahn project

