

Gleisbogen Bridge (Switzerland)



Project description

This elegant foot and cycle bridge was erected to connect pedestrian zones either side of a busy traffic artery, and consists primarily of an arch-supported deck with 42 m span. Intensive construction activity is planned to take place in this area in the coming decade, including several high rise buildings. This will lead to uncontrollable ground settlements in the whole area, including in the immediate vicinity of this newly built structure.

mageba scope

A number of specialised components and services were required to ensure the correct construction of the bridge, with even load distribution, especially among its hanger cables, and to allow for adaptation in the future should ground settlements occur. Injectable lifting pot bearings were installed under the structure, to allow any future ground settlements to be countered. An automated monitoring system helped to ensure the even distribution of loading among the bridge's hanger cables. And spring disc dampers were installed at the bottom of each hanger cable to prevent vibrations of the deck.

Highlights & facts

mageba products:

Types: ROBO®CONTROL
"Portable" monitoring system
RESTON®POT Lift bearings
RESTON®SDD Spring Disc Dampers

Notable: Support in achieving and confirming optimal construction for maximum durability of the structure

Installation: 2011

Structure:

City: Zurich
Country: Switzerland
Type: Arch bridge
Length: 230 m

The bridge is located close to Zurich city centre



An inclined lifting pot bearing at one end of the bridge



Acceleration sensors - used to determine the load distribution in the steel structure

