Footbridge Sassnitz

schlaich bergermann
und partner

Location	Sassnitz, Germany
Type of structure	curved suspension bridge with one-sided suspension cables
Owner	BIG-Städtebau Mecklenburg-Vorpommern GmbH, Stadt Sassnitz
Completed	2007
Scope of our work	conceptual design, construction design, site supervision, lighting design
Architect	schlaich bergermann und partner
Cooperation	Architekturbüro Pieper, Binz

Technical data

Total length	243 m (797 ft)
Length / span	119 m (cable bridge) (390 ft) 124 m (407 ft) (10 x 12.4 m) (ramped bridge)
Width superstructure	3 m (10 ft)
Height differential	15.7 m (51.5 ft) (+ 5.6 m existing ramp)
Deck surface	729 m² (7,847 sq ft)
Award	Deutscher Brückenbaupreis 2010

The connection between the city center of Sassnitz and the harbor was to be achieved as a barrier free connection regardless of the large elevation differential of 22 m. The special feature of the structure is clear in the one-sided suspension of the circular ring girder combined with the eccentric arrangement of hanger cables. The hanger cables are not attached, as is typical, along the superstructure, but instead connect to small cantilevers that run along the side of the walkway. This effectively connects the cable centerlines with the center of gravity of the superstructure. Through the reduced loading the superstructure could be designed to be extremely thin. Attached to the suspension bridge is an elevated composite structure ramped bridge. Cables with galfan coating ensure minimal maintenance even with the wet sea climate. The result is a light structure that presents an open view of the ocean and the harbor.

Photos: Wilfried Dechau