

Bridge Sculpture "Slinky springs to fame"

schlaich bergemann
und partner

Location	Oberhausen, Germany
Type of structure	multispan stress ribbon bridge
Owner	Emschergenossenschaft
Completed	2011
Scope of our work	conceptual design, construction design, lighting design
Contractors	ARGE Stahlbau Raulf; IHT Bochum
Cooperation	Bauplan GmbH Wagner + Partner, Gelsenkirchen; Madako, Oberhausen

Technical data	
Total length	406 m
Span	20 - 66 - 20 m (stress ribbon), 10 m (ramps)
Lengths of the ramps	130 resp. 170 m
Bridge width	2.67 m
Deck surface	1,085 m ²
Superstructure height	12 cm (stress ribbon), 25 cm (ramps)
Awards	Stah-Innovationspreis 2012; Footbridge Awards 2014 medium span and Lighting Award (highly commended)

The elegant pedestrian bridge across the Rhine-Herne canal is a part of the project "EMSCHERKUNST 2010". Following the design of the artist Tobias Rehberger, a colorful ribbon wrapped in a light, swinging spiral connects the two existing parks. The lightness of this design is due to the minimalist structural design of the stress ribbon bridge. Two steel ribbons made of high strength steel connect to the inclined supports across the canal. The resulting tension force is transferred into strong abutments through the outer vertical tension rods. The walkway consists of pre-cast concrete plates, bolted to the stress ribbon, to which the railing and spiral are attached. The springy synthetic pavement of the walkway as well as the colorful rhythmization of the concrete and coating amplifies the dynamic experience of the bridge. Railings made of steel and cable nets effectively add to the dampening of this animated bridge.

Photos: Roman Mensing / artdoc.de (right, left bottom)

