The bridge across the Baakenhafen, will form the main link into a major new harbour development in Hamburg. Working with architects Wilkinson Eyre, BuroHappold Engineering have undertaken full detailed engineering design of this deceptively simple bridge, spanning the Elbe River at HafenCity, Europe's largest inner-city development.

Comprising three traffic lanes, cycle lanes and undulating cantilever walkways within its 21m width, the bridge also provides terraces with seating to allow pedestrians to pause and enjoy the river views as they cross.

Flexibility and sustainability were vital to the success of this project, so we came up with an ingenious design incorporating a 30m long moveable element in the middle of the bridge. The 560 tonne deck can be lifted by a simple barge which moves up and down with the tide, raising and lowering the section as it goes.

The elegant new bridge has three spans and a total length of 170m. We used advanced analytical methods to develop and test the design, which conceals transverse ribs and geometrically complex stiffened girders, within the steel deck, to create the visually fluid superstructure.

BuroHappold has been involved with the project since winning an international design competition with architects Wilkinson Eyre. Since the opening in August 2013 the Baakenhafen Bridge has been widely recognised on both a national and international level, culminating with a RIBA International Prize in 2014. The project was also a finalist in the prestigious German Bridge Construction Prize awards.

**CLIENT**
HafenCity Hamburg GmbH

**ARCHITECT**
Wilkinson Eyre Architects

**PROJECT VALUE**
€12 million

**DURATION**
2009 – 2013

**SERVICES PROVIDED BY**
BuroHappold
Bridge engineering, structural engineering,
building services engineering

---

**BAAKENHAFEN BRIDGE**
HAMBURG, GERMANY

Image © HafenCity Hamburg GmbH/Wilfried Dechau