GATESHEAD MILLENNIUM BRIDGE



Height: 45 m (146 ft)
Length: 126 m (413 ft)
Width: 8 m (26 ft)
City: Tyneside
Country: England
Built: 1998 – 2001

The Gateshead Millennium Bridge is a pedestrian and cyclist tilt bridge spanning the River Tyne between the Gateshead arts quarter on the south bank and the Quayside of Newcastle upon Tyne on the north bank. Opened for public use in 2001, the award-winning structure was conceived and designed by architectural practice WilkinsonEyre and structural engineering firm Gifford. The bridge is sometimes referred to as the 'Blinking Eye Bridge' or the 'Winking Eye Bridge' due to its shape and its tilting method. The Millennium Bridge stands as the twentieth tallest structure in the city and is shorter in stature than the neighbouring Tyne Bridge.

DESIGN

The bridge was lifted into place in one piece by the Asian Hercules II, one of the world's largest floating cranes, on 20 November 2000. It was opened to the public on 17 September 2001 and was dedicated by Queen Elizabeth II on 7 May 2002. The bridge, which cost £22m to build, was part-funded by the Millennium Commission and European Regional Development Fund. It was built by Volker Stevin.

Six 45 cm (18 in) diameter hydraulic rams (three on each side, each powered by a 55-kW electric motor) rotate the bridge back on large bearings to allow small ships and boats (up to 25 m, 82 ft tall) to pass underneath. The bridge takes as little as 4+1/2 minutes to rotate through the full 40° from closed to open, depending on wind speed. Its appearance during this manoeuvre has led to it being nicknamed the "Blinking Eye Bridge". The design is so energy-efficient that, in April 2017, it cost just £3.96 per opening.

The bridge has operated reliably since construction, opening to allow river traffic to pass. It also opens periodically for sightseers and for major events such as the Northumbrian Water University Boat Race and the Cutty Sark Tall Ships' Race. One of the principal requirements for opening the bridge is to allow access to HMS Calliope where Royal Navy patrol boat HMS Example is based.

For the construction of the bridge, the architect WilkinsonEyre won the 2002 Royal Institute of British Architects Stirling Prize and Gifford the 2003 IStructE Supreme Award. In 2005, the bridge received the Outstanding Structure Award from the International Association for Bridge and Structural Engineering.

Bollards were installed when the bridge was built to protect it from collisions. As the bollards were unsightly, and as it became noted that they were not really needed, they were removed in March 2012.

Tilt times for the bridge are displayed on the bridge and Gateshead Council website.