

Gateshead Millennium Bridge

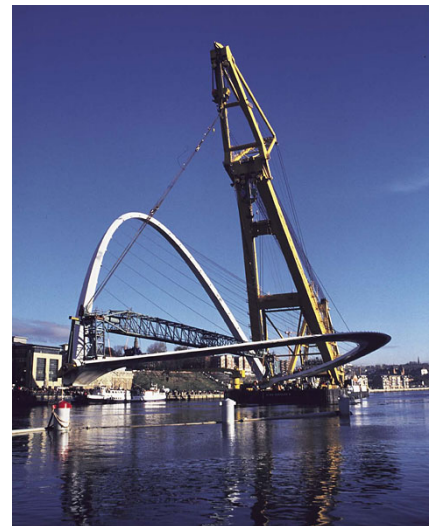
Brief description of control systems

- Movement of bridge tilting mechanism
- Advanced monitoring of bridge position
- Advanced control of bridge position ($\pm 0.2^\circ$)
- CCTV position selection
- Control of 14 No electrical motors and 2 No diesel power packs
- Control of all pedestrian warning devices



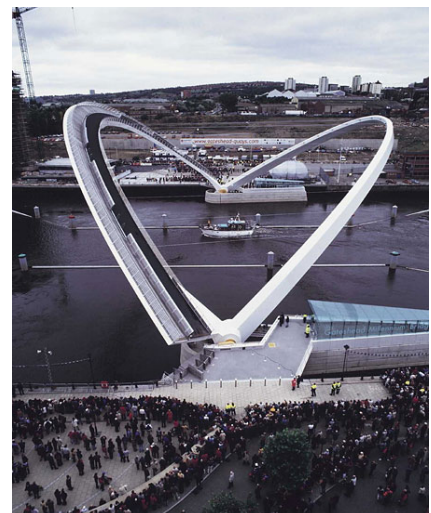
Responsibilities:

- Design and authoring of MEA&H full mechanical, electrical and hydraulic specification
- Design and authoring of control system specification
- Supervising consultants for all MEA&H systems
- Advisors on hydraulic mathematical modelling
- Dynamic modeling of bridge including hydraulic performance and PLC PID control loop



Hardware:

- 3 No Allen Bradley PLCs
- Allen Bradley panel view 500 operator terminal



Bennett Associates (originally founded in 1984) was acquired in 2008 by Atkins; bringing their proven technical expertise to the UK's leading engineering consultancy.