The Power in Modelling





Civil Engineering

Swing Bridge

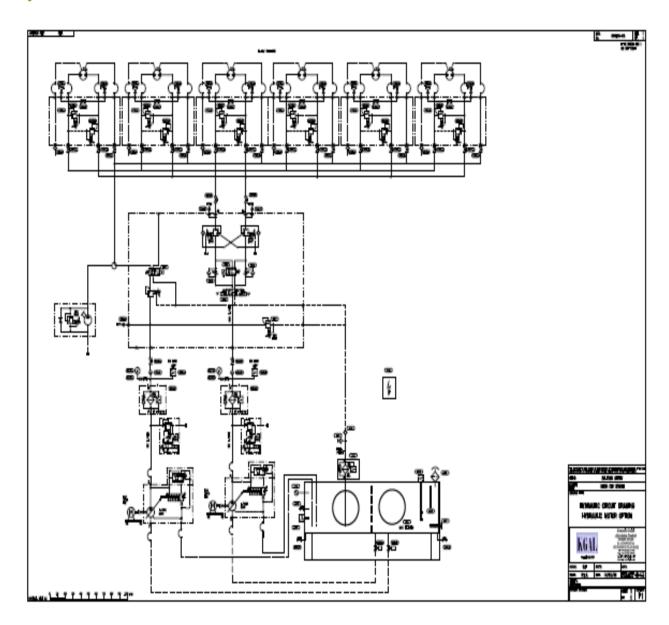
KGAL

KGAL (Kenneth Grubb Associates Limited) was formed by Ken Grubb in 1991 and today, as KGAL Consulting Engineers Ltd., offers a complete structural, mechanical, hydraulic and electrical engineering service in the field of hydro-mechanical equipment, through all stages of a project from conceptual design development to final commissioning on site. For the Media City Swing bridge, a feasibility study was carried out using modelling and simulation.

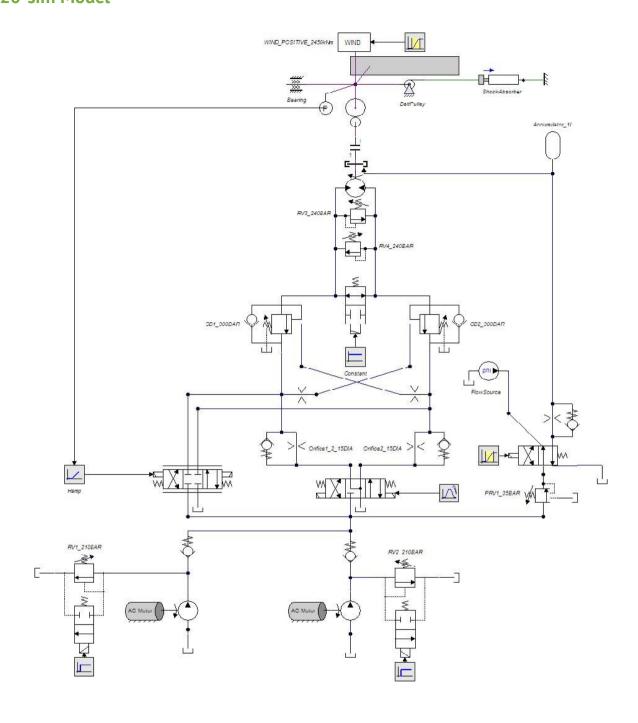
Objectives

- Create a model of the hydraulic drive system of the bridge.
- Simulate various scenario's and verify the correct operation of the bridge

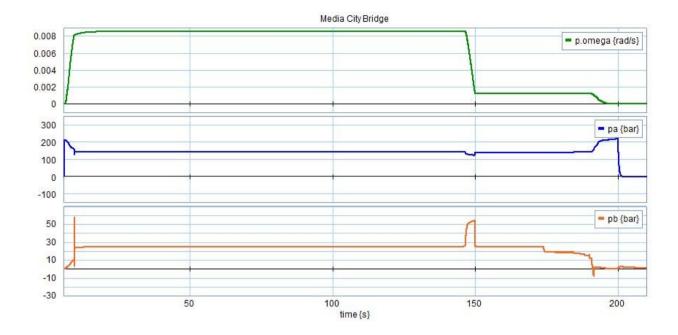
Hydraulic Circuit



20-sim Model



Simulation



Results

- The hydraulic system is fit for its job.
- The bridge will able to operate at severe wind load.
- More dampers at the end tip of the bridge are required.

