

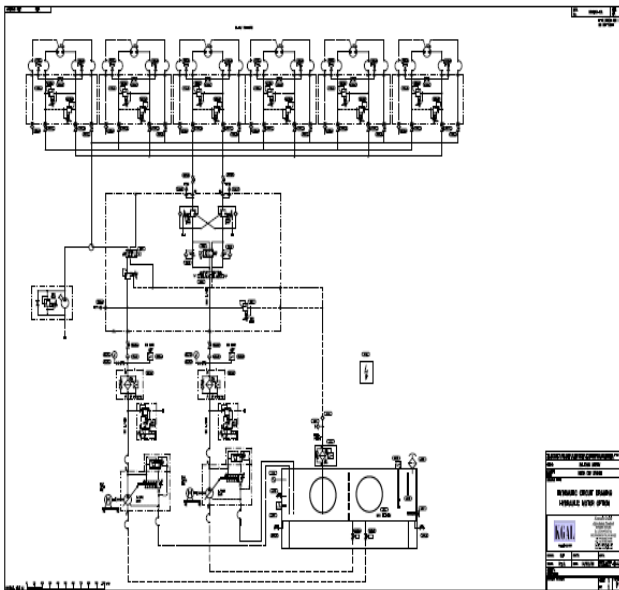


High Tech Systems – Model Based Product Development

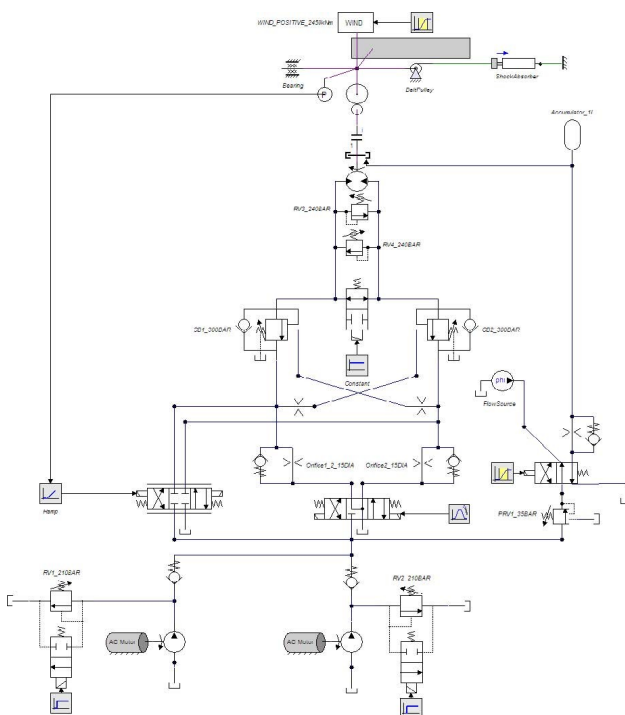
Swing Bridge

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.

Hydraulic Circuit



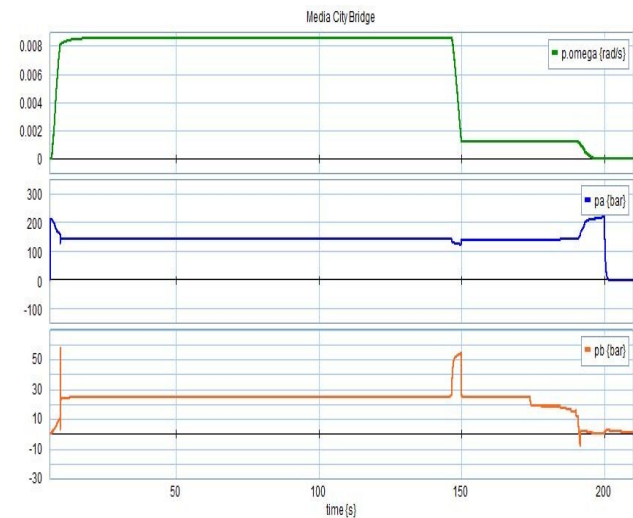
20-sim Model



Objectives

1. Create a model of the hydraulic drive system of the bridge.
2. Simulate various scenarios and verify the correct operation of the bridge.

Simulation



Results

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

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