

Case Study

Service: Load Test on Timber Jetty

Location: Sugar Quay
Lower Thames St, London

Client: Beckett Rankine

Swantest were contracted by Beckett Rankine at Sugar Quay, Lower Thames Street, to conduct a series of load tests on a timber jetty. The purpose of the test was to check the bearing capacity of the jetty and record settlement in the structure under load.

These series of tests would test the timber deck construction but also the timber pile groups which support the structure. By studying archive drawings, we were able to establish the location of the pile groups and apply a specified load to these particular areas. Using water tanks as kentledge and a pumping system we could accurately control the load that was being applied while at the same time record the settlement.

This type of test can be used to check existing structures that will be used for a different purpose than they were designed. Using water tanks as kentledge was ideal for this project as access on to the jetty was restricted so no vehicles could access the area.

Key to images:

1. Displays an engineer using a dumpy level to record any deflection around the water tanks.
2. Four water tanks filled half way inducing the required load.
3. Shows the tanks filling up a hose pumping from a water bowser.

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