Bill Boley Project Profile

Total Solutions in Controlled Hydraulic Movement and Jacking

Project Designation/ Location

Checking torque settings on critical steel barrier gate components as part of ongoing maintenance on the Thames Barrier, London.

Client

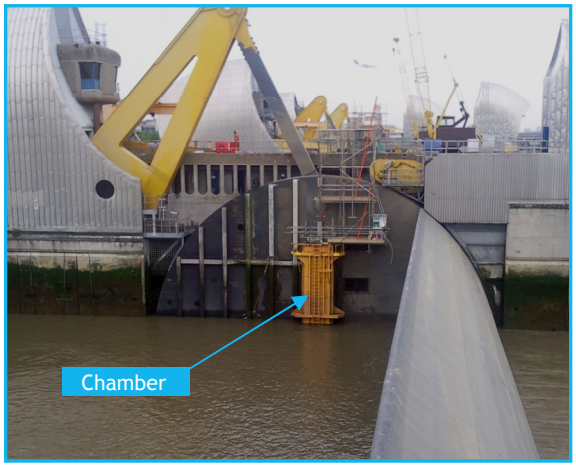
Volker Stevin

End Customer

Environment Agency

Project Challenge

To allow contractor to check the release torque settings of bolts retaining the trunnion shafts on the 10 barrier gates (66 bolts per gate), up to 4 metres below waterline in confined chamber.



Bill Boley Solution

50 tonne hollow ram jacks, with special mechanical adaptors, are being used to apply a pre-tension to the bolt assemblies one at a time so that torques can be checked. The work is being painstakingly carried out in very a confined space below the waterline.

Background Information

The Thames Barrier is one of the largest movable flood barriers in the world, protecting 125 square kilometres of central London from tidal surges. That's 1.25 million people plus historic buildings, offices, power supplies, tube lines, hospitals and more. The Environment Agency runs and maintains the Thames Barrier as well as the capital's other flood defences.

The Thames Barrier is also one of London's most striking and famous landmarks. With its distinctive stainless steel piers it spans 520 metres across the Thames near Woolwich. The barrier, which became operational in 1982, has 10 steel gates that can be raised into position across the River Thames if a tidal surge is predicted. When raised, the main gates stand as high as a five-storey building and as wide as the opening of Tower Bridge. Each main gate weighs 3,300 tonnes.

www.billboley.co.uk wboley@billboley.co.uk Tel: 01538 300551

Bill Boley
"Controlled Hydraulic Movement"