



Owner : Roads & Traffic Authority NSW
Engineer : Roads & Traffic Authority NSW
Engineering consultant : Baulderstone Hornibrook Pty Ltd

Subsidiary(ies) : Freyssinet Australia

Beginning of works : 01/1992
End of works : 12/1995

Description of the work :

The Anzac Bridge (then known as the Glebe Island Bridge) represents the newest landmark bridge in Australia and is now a major feature on the Sydney skyline. Located in the Pyrmont area of Sydney this 350m central span, cable stayed bridge links Victoria Road with Pyrmont, Ultimo and the Sydney CBD. It is the longest bridge in Australia to use the cable stayed structural form.



Freyssinet mission :

Freyssinet Australia were selected to undertake the supply and installation of various new engineering technologies required to complete the construction of this landmark bridge. These included :

- Stay cables to the main deck
- Post-tensioning to the main deck and approach viaducts
- Rock anchors
- Tower Jumpform System
- Heavy Lift for components of the main deck and the approach viaducts.

Freyssinet Australia's heavy lift system was used 25 times throughout the project varying in weight from 100 to 300 tonnes. The highlight of these operations was the raising and lowering of the formtraveller used to construct the overwater deck segments. The formtraveller, 30m long and 32m wide, is a steel truss weighing 280 tonnes and supports the formwork for one deck segment.

After the western half of the water span was completed the formtraveller was lowered onto a barge with the rising tide used to gradually take up the weight of the traveller before it was moved across to the eastern tower to start work there.

All heavy lifts utilised Freyssinet Australia's L180 centre hole heavy lift jacks specifically adapted for failsafe lifting of such structures. Each jack has a safe working capacity of 180 tonnes and is powered by a purpose built electric hydraulic pump unit which can independently control up to 4 jacks at once so that lifting and lowering can be carried with a high degree of accuracy and speed.

