



Flinders Ports Berth 8 Outer Harbour Grain Wharf

Adelaide, Australia



Architect
**MAUNSELL AUSTRALIA
PTY LTD**

Contractor
BUILT ENVIRONS PTY LTD

Coverage
4,500 CUBIC METRES

Products
ADMIX C-1000 NF

Project Type
MARINE STRUCTURES



Corrosion resistance, durability and an extended service life with reduced maintenance costs were key priorities for Flinders Ports in the recent construction of their new Berth 8 Outer Harbour Grain Wharf.

The concrete wharf is a concrete deck and beams on piles structures 228 m long with a roadway along the quay, deep rail support beams and two 36 m wide access ramps. It is designed to berth Panamax and Post-Panamax vessels and will support a travelling shiploader. A total of approx 4,500 cubic metres of concrete was poured. Xypex Admix C-1000 NF was specified as the most suitable product to effectively protect and improve the berth's concrete structures for the specified 50 year structure life.

Xypex Admix C-1000 NF generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete. This permanently seals the concrete and prevents the penetration of water and other liquids from any direction. Xypex Admix C-1000 NF is particularly suited to this wharf structure as its chemical composition slows the diffusion of chloride penetration, ensuring protection from the harsh marine environment. Pile plugs, pile caps, rear ramp support walls, wharf beams, the deck and ramps were all dosed with Xypex Admix C-1000 NF at a rate of 3.9 kg per metre.

The project was managed by Egis Projects Asia Pacific Pty Ltd. The wharf was designed by Maunsell Australia Pty Ltd and constructed by Built Environs Pty Ltd.

