



# SIKA AT WORK

## GROUTING OF DOLPHIN PILES FOR WHARF EXTENSION, CAPE LAMBERT, AUSTRALIA

OFFSHORE CONTRACTING SERVICES  
INSTALLATION SERVICES  
ENGINEERING SUPPORT

BUILDING TRUST



# GROUTING OF DOLPHIN PILES FOR WHARF EXTENSION



## PROJECT DESCRIPTION

Cape Lambert is a port facility operated by Rio Tinto Group in the Pilbara region of Western Australia. It's one of the two seaports for exporting iron ore which is transported into port via the Hamersley & Robe River railway.

Project name: Grouting services for installation of dolphin piles  
Location: Cape Lambert, Western Australia  
Year: 2011/2012  
Key market: Marine Infrastructure

## PROJECT REQUIREMENTS

The Port-B wharf extension at Cape Lambert, Western Australia, required the installation of 18 mooring dolphins with 108 pile sleeve connections and foundation plugs for the dolphin piles. The dolphin piles of about 1.7 m diameter were to be grouted using ultra-high performance cementitious (UHPC) grout to about 6 m height.



## SIKA SOLUTIONS

Sika provided UHPC grout as well as detailed grouting procedures and ad-hoc engineering support during the preparation and grouting of the dolphin piles.

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



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## CUSTOMER BENEFITS

- The highly viscous and cohesive UHPC grout prevents the risk of cement particles washout and mixing with water.
- This pumpable UHPC grout is ideal for annulus grouting of pile sleeve connections and is specifically developed for offshore subsea applications. It develops excellent mechanical properties combined with low shrinkage, early strength development, and unique fatigue performance.

## PROJECT PARTICIPANTS

Project owner: Rio Tinto Group

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