Sydney Central Station

ROBORIGGER

sydney METRO

LAING O'ROURKE



Project Overview:

Client: Sydney Metro
Project: Sydney Central Station
Value: AUD$955 million
Location: Sydney
Date: 2020
Unit: ARM1500-35 (WLL

Usage: Erection of steelwork and lifting of large steelwork modules over critical infrastructure.

Allowed faster assembly of roof steelwork with fewer people

Laing O'Rourke was awarded a $955 million contract that included the upgrade to Sydney's Central Station. The steelwork was fabricated in Kurri Kurri NSW, 130 km north of Sydney where it was trial assembled. The steel fabricator undertook the trial erection with two riggers and a crane driver.

Because Roborigger was used, taglines were eliminated and there was no need for a rigger on the ground to control the load. This allowed both riggers to be in the elevated work platforms (EWP) ready to install the components, significantly improving the overall rigging and installation times.

Onsite, Laing O'Rourke used a Roborigger ARM1500-35 for the installation at Central Station during narrow time windows when the lines were shut. The roof was pre-assembled into modules of up to 30 tonnes adjacent to the lift site at Central Station and the modules were then lifted into place.



Huge risk reduction for lifts in hazardous areas and around heritage buildings

Roborigger eliminated the need to use taglines that could interfere with existing electric rail infrastructure or heritage buildings in the vicinity. It also eliminated the need for personnel to be underneath or near steelwork as it was lifted into place. This offers a huge risk reduction for the Project.



"The use of Roborigger will eliminate having a tagline drag across the public spaces during install, and most importantly, allow us to manoeuvre our modules around heritage buildings." - Lachlan McMaster, Site Engineer