



Cardinia Creek Bridge uses Omniflex Cathodic Protection

When Infracorr Consulting required an impressed current CP system, they chose Omniflex because of the remote monitoring and control capability.



Luke Thompson, Technical Manager for Infracorr during system commissioning.

“We had no hesitation in choosing the Omniflex CP system.”



When Infracorr Consulting were retained by VicRoads to design, supervise and commission an Impressed Current Cathodic Protection system in accordance with VicRoads specifications to address extensive chloride induced reinforcement corrosion of the six reinforced concrete pier supporting the South Gippsland Highway Bridge over Cardinia Creek in the state of Victoria Australia, they chose an Omniflex Cathodic Protection system because of the remote monitoring and control capability.

Infracorr

VicRoads is an arm of the Victorian Government in Australia and manages over 22,000 kilometres of roads and 3133 bridges.

Infracorr Consulting is an innovative specialist engineering consultancy offering unbiased advice on rehabilitation solutions for infrastructure damage caused to assets by corrosion and deterioration of materials.

With over 25 years experience in the investigation, repair and protection of all types of structural assets and with specialist materials knowledge, Infracorr aim to provide optimal corrosion mitigation solutions in preserving and extending the lifespan of infrastructure with minimal cost and disruption.

The Challenge

Cardinia Creek Bridge is located about an hour east of Melbourne on the South Gippsland highway.

The bridge was suffering from extensive corrosion that required an impressed current CP system and close monitoring to ensure that the corrosion had been arrested.

The bridge is 10 metres wide and spans 32 metres with two main supporting piers, each with three reinforced concrete columns and a pile-cap just above the river bed to the headstock supporting the bridge deck.

The tidal range is over 3 metres.

The Solution

To accommodate for the large tidal range of this waterway, the system was split vertically into individually controllable zones. Local junction boxes on each headstock incorporate balancing resistors which distribute power to sub-zones in the different columns as required.

Omniflex supplied a fully remotely controlled TRU located adjacent to the west abutment. The remote monitoring capability of the system allows full monitoring and control of the system from anywhere with Internet access.



Omniflex CP system at Cardinia Creek



Cardinia Creek Bridge.

“The Data2Desktop remote monitoring and control capability has reduced the number of site visits we need to make.”

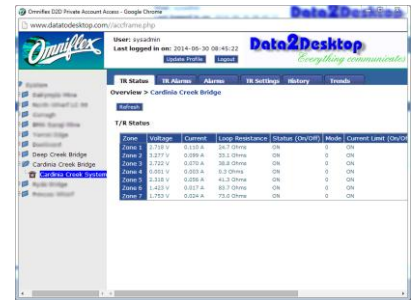
Luke Thompson
Infracorr.

The Result

Luke Thompson, Infracorr said *“We had no hesitation in choosing the Omniflex CP system. We had used Omniflex’s Data2Desktop remote monitoring and control on a number of CP projects before including a similar bridge over Deep Creek on the same highway, and the system has proved it can save us money by reducing the number of site visits we need to make.”*

“By having all the assets we monitor accessible through the same web interface we can consolidate our monitoring and reporting into one convenient tool that saves us time.”

All enquiries to Omniflex



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