



MAGELLAN POWER CASE STUDY

Port Kembla Steelworks

BlueScope Steele employs around 3,500 people at the Port Kembla Steelworks. BlueScope accounts for more than \$2 billion in sales of locally produced steel each year, and the Port Kembla Steelworks has a production capacity of 2.6 million tonnes of steel per annum. The Steelworks covers 760 hectares.



Client
Blue Scope Steel

Date
2015

Location
Port Kembla, NSW

Scope of Project
2 x 240MCRII020 Battery Chargers,
100Ah Lithium batteries, Full Battery
Test Facility.



Client Requirement

Magellan were required to design, manufacture, supply and install two MCR11 chargers, complete with 100Ah Lithium Battery banks for the Steelwork's Emergency Lighting Main Switch, and Vacuum Degasser Emergency Supply Main Switch. The main challenge with this project was that the battery charger needed to supply a high current for a short period of time. The existing charger was supplying this load with Lead Acid batteries, but the cells were not performing and were frequently being damaged by the application.



Magellan Solution

Magellan offered a Lithium Battery based solution due to a higher charge / discharge rate, and higher cell efficiency. The second challenge was access to the battery room, and limited footprint. This restricted the type of batteries that could be used. The use of Lithium was able to overcome this problem due to the light-weight and compact design of the batteries.

The Magellan Power Australian made MCR11 features integral battery capacity measurement that can assess the health of the battery and the integrity of its connections, making it one of the most advanced battery management system of its kind. Incorporating dual battery management capabilities including automatic battery testing, the MCR11 prolongs battery life in any application, and can be used with Lead Acid, Lithium and NiCad batteries. The equipment is highly reliable, robustly designed, has a 25 year design life, and advanced communication facilities that enable full remote monitoring of the system.

