

Port of Tyne - Wind Monitoring

Campbell Scientific Wind Monitoring systems ensure workforce safety and regulatory compliance on cranes at the Port of Tyne



The Port of Tyne is the UK's 2nd largest coal port and Europe's largest wood pellet handler. Several cranes are in operation at the port, all of which must, by law, monitor wind speed and direction to ensure safe working conditions. For many years, Port of Tyne has trusted the reliability of Campbell Scientific monitoring systems to comply with regulations and to keep its workforce safe.

The monitoring stations include an ultrasonic anemometer for measuring wind speed and direction, which is reliable, robust and ideal for harsh marine environments. The anemometer is mounted at the top of the crane, and sends wind data to a CR200X datalogger which is fixed outside of the driver's cabin, nearer the bottom of the crane. The readings are transmitted via an RS485 connection to ensure good signal quality over relatively long distances. Before the operator enters the cabin, wind conditions

are checked to determine if operations at that altitude can go ahead. A CD295 data view display is attached to the datalogger's enclosure and provides all the necessary information at a glance.

Information on the wind conditions are also transmitted to the port operation office and these are monitored via real time displays, just in case the wind conditions change whilst the crane is in operation.

A NL200 Network Link Interface is used to enable a TCP/IP connection between the logger and the operation office, and LoggerNet and RTMCPPro software is used to create and run user-friendly, graphical screens that provide real-time monitor and control capabilities. This data display software presents the wind data at the top of the crane to the port operator who can instruct the crane operator to exit the cabin, should the wind conditions worsen during

operation. RTMCPPro is also able to run graphical and visual alarms to assure the highest safety standards.

This Campbell Scientific wind monitoring solution is applied at many ports and harbours across Britain, ensuring safe operations and regulatory compliance.

Case Study Summary

Application:

Wind Monitoring on top of a crane

Location:

Port of Tyne, Jarrow, UK

Contracting Agencies/Organizations

Port of Tyne Authority

Campbell Products Used:

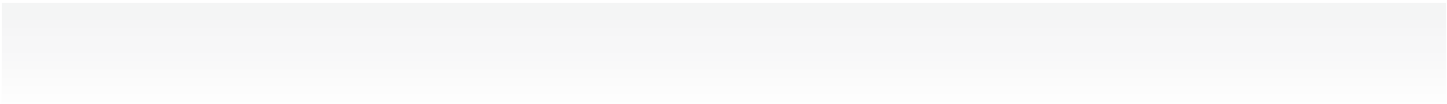
CR200X
NL200
CD295
LoggerNet
RTMCPPro

Communication Links:

Direct, TCP/IP

Measured Parameters:

Wind speed and direction



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