ComBricks Help Container Terminal
Work Round the Clock

Discover how the ComBricks enabled ECT to prevent crane downtime in their busy Euromax container terminal.

Port cranes are the lifeline of any container terminal. Without them, cargo cannot be loaded or unloaded, and the entire operation comes to a standstill. At ECT’s Euromax container terminal, the port cranes were frequently breaking down due to issues in the PROFIBUS network. To prevent such incidents from occurring, ECT turned to Procentec (now Anybus) for a solution. The ComBricks was chosen to segment and monitor the PROFIBUS network, providing ECT’s maintenance team with real-time alerts to any potential issues. As a result, ECT can now proactively address any problems before they escalate and cause crane downtime, ensuring that the terminal operates smoothly 24/7.

Meet the customer

Hutchison Ports ECT Rotterdam (ECT) is one of the leading and most advanced container terminal operators in Europe, handling the majority of the containers at the port of Rotterdam. ECT’s Euromax container terminal relies heavily on its 16 port cranes, which are essential for transferring cargo to and from ships. However, the cranes were frequently breaking down due to problems in the PROFIBUS network, causing significant disruptions to the terminal’s operations.

“We contacted Procentec because we had a lot of problems with breakdowns in the PROFIBUS network in the past,” explains Jos Poss, technical specialist at ECT’s Planning and Control Department and support officer for the Technical Maintenance Service. “This is because if any one part of a crane broke down, the rest did as well. A company like ECT can’t afford to let this happen. We work around the clock, and all the steps in the process are geared toward one another. So, we had to find a solution.”
24/7 reliable operation

To ensure that the cranes were operational 24/7, ECT required a reliable method of monitoring the PROFIBUS network, promptly detecting and resolving any issues before they caused downtime.

ECT opted for the ComBricks modules to guarantee operational continuity now and in the future. “At that time, we were one of the first enterprises to work with ComBricks,” says Jos. “And we’re very happy with it. The new network with ComBricks has been running for a year now, and we’ve hardly had any breakdowns at all to date. ComBricks is a very reliable system, and the most important aspect of the matter is that our previous problem has now been solved. This success is largely due to the support and advice we’ve had from Procentec. They gave an on-site training course on working with ComBricks, and one of the incredible things about this was the practical part carried out on one of our port cranes. It was really helpful!”

The new layout in the PROFIBUS network is a crucial success factor

Segmentation was one of the significant success factors in this respect. “We opted for a new layout for the PROFIBUS network in consultation with Procentec engineers,” Jos explains. “A logical structure is key here. The driving mechanisms are in different segments right now. Each segment has its own string and is controlled by a ComBricks module without any of the strings affecting each other! This means that a breakdown in one string can be isolated from all the other strings, and we can safeguard the crane during a breakdown. And at the same time, the module tells us where exactly to find the error in the network. The analysis of the error made by the scope card in the module is really useful if the error is a frequently recurring one. The repairman can now go on the crane without any measuring equipment and repair the defect. And this means greater operational safety.”