



# Case study MacGregor

# MacGregor. Keeping turnarounds brief.

Can we keep  
turnarounds  
brief?

Definitely.



## The client

A world-leading cargo handling company, Cargotec has 10 500 employees in 120 countries. Covering the full cargo-handling spectrum, company products and services range from shipboard cargo-handling and dockside ship-to-shore cranes to lashing systems and software, cargo-handling vehicles, port and terminal infrastructure and cargo-flow consultancy.

## The challenge

Cargotec needed to replace the conventional contactor technology installed in its MacGregor range of electric and electro hydraulic shipboard electric cranes. These low-impact high-performance cranes are powerful units, able to handle loads of up to 450 tons. The largest vessels mount as many as six cranes, featuring variable frequency drives powered by diesel generators.

Sometimes, with cranes operating simultaneously, demand on the generators proved excessive, producing a temporary sag in voltage. The conventional contactor technology was not able to handle these fluctuations, resulting in frustrating and costly stoppages. Several contactors were being replaced almost weekly.

With vessels queuing to dock and the cost of delays measured in millions of dollars, an urgent solution was needed. Cargotec turned to their supplier ABB.





# 450 Tons

Cargotec's MacGregor cranes can lift 450 tons. That can be compared to the weight of 2 ½ blue whales.



## The ABB solution

Working closely together, Cargotec and ABB discovered that the conventional contactors originally specified lacked the flexibility necessary to accommodate the voltage fluctuations that arose when several cranes were operated at the same time. Refitting with ABB's AF contactors immediately solved the problem. The AF contactors feature an electronically controlled coil, able to accommodate a much wider voltage range than conventional equivalents. Until the AF range was installed, voltage sags had led to several stoppages a week, when contactors welded shut. Since then, replacements have been minimal.

Cargotec has been able to deliver on its promise to keep cargos moving, securing enhanced reliability and reducing service requirements and costs. Known for their superior quality and able to operate in the most hostile environments, Cargotec's MacGregor deck cranes have established an enviable global reputation for reliability. On land, in port or at sea, Cargotec is synonymous with optimal cargo handling.

**To keep things moving, you need Control.**



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