

CLIENTBaker Hughes

LOCATION

Darwin, Australia

PROJECT BACKGROUND

Proserv was approached to devise a way of managing 4" chemical transfer hoses from the wharf over the gunwale of a vessel alongside during bunkering (transfer) operations. Depending on the vessel and the tide the gunwale was over four meters above the level of the wharf, and hose management was formerly achieved with manual handling and mobile cranes.

A number of different chemicals require bunkering, some of which are corrosive, and this necessitated special consideration to guard against corrosion and spills.

SOLUTION

Because a number of different hoses required management a modular system was devised that allowed dedicated hose reels to be dropped onto a common deployment mechanism. This strategy reduced initial expenditure and allowed the operator to quickly and efficiently change the fluid being transferred by exchanging reels using a forklift.

A pneumatic rotary drive system deployed and recovered the hose from the reel, greatly reducing manual handling requirements. A pneumatically driven arm mechanism lifted the hose to the required position above the gunwale from where it could be accessed by technicians on the ship.

INNOVATION, BENEFITS, ADVANTAGES

Historically our tools are designed to be operated by ROVs, so fresh considerations arose when designing equipment to be used by technicians quayside. Safety mechanisms to prevent the reel being lifted away when the drive system is engaged, safe working platforms, guards and ergonomic design were among the features used to keep the operators safe.

QUOTE

"Proserv has delivered a novel and efficient solution to a new client in a non-traditional market by leveraging existing contacts and engineering knowhow. The success of this project highlights the relevance and value of 'ingenious simplicity' in solving any challenge for any client." Linden Jones









