



# CARGO WHARF FENDER REPLACEMENT

DAMPIER, WA

MAINTENANCE - MARINE

## PROJECT

Dampier Cargo Wharf Fender Replacement

## CLIENT

Pilbara Ports Authority  
 Daniel Fisher 0409 584 664

## DURATEC / DDRIC CONTACT

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## DESCRIPTION

The Dampier Cargo Wharf (DCW) was constructed in 1982, and provides seven berths for the loading and provisioning of vessels servicing the marine industry and offshore oil and gas fields. The fenders on the western side of the DCW are in poor condition and Duratec and DDR have been engaged to replace the old high maintenance ones with a more modern and durable design for an extended service life.

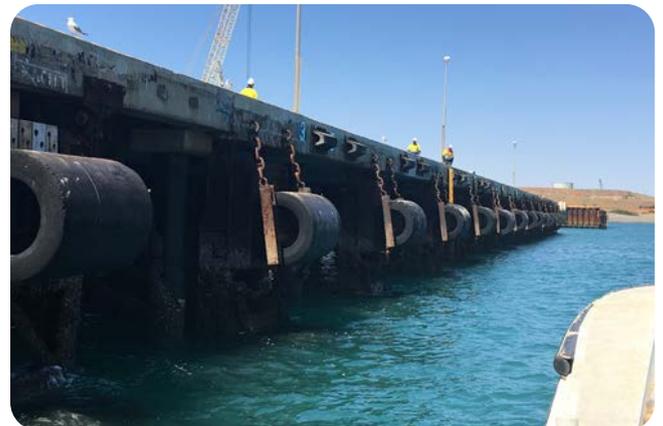
The scope of work will include:

- ▶ Removal of the existing cylindrical fender system.
- ▶ Concrete remediation works on the berth face and fender attachment points to reinstate suitable fixing points for the fenders, including remediation of mechanical fastenings.
- ▶ Installation of a replacement cone fender system.

To minimise disruption, the wharf components will be manufactured off-site and works implemented in two stages (half of the wharf length at a time) to ensure that essential customer services are maintained.

## HIGHLIGHTS

- ▶ Developed an over edge access system and aluminium suspended access platform to allow removal and installation of fender frames including bracing stays without being restricted by tidal movements.
- ▶ Whilst overseas fabrication was looked at as being a low cost option, successful negotiation with WA country based fabrication and a desire to procure locally resulted in the fabrication and coating work remaining in WA.
- ▶ Addressed the problem of the removal of the existing fenders and installation of new fenders (including bracing stays over water) by lifting them with a land based crane whilst disconnecting the back stays (utilising divers for the lower disconnections) and lowering the rear of the back stays with remote controlled 12 volt winches (mounted on rated anchor points set into the underside of the concrete wharf) onto floatation bags. Once resting on the bags, the back stays will be towed out by a Duratec vessel and lifted out utilising the existing crane.



IMAGES (FROM TOP TO BOTTOM)

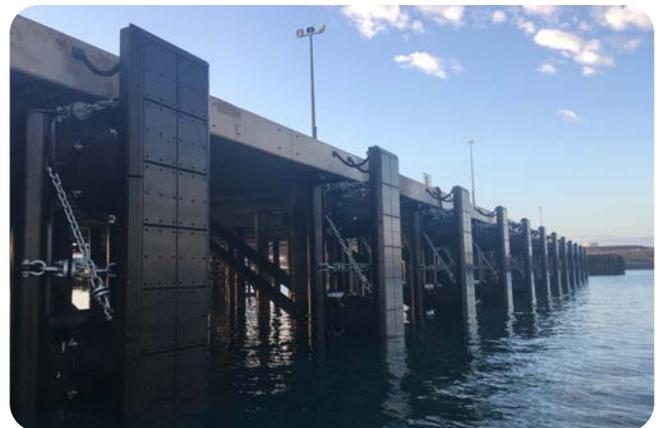
- ▶ Overview of the cargo wharf.
- ▶ Overview of existing fenders.
- ▶ Detail of existing fender.



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IMAGES (FROM TOP TO BOTTOM)

- ▶ Access system in place.
- ▶ Fender removal below deck.
- ▶ Fender removal above deck.

IMAGES (FROM TOP TO BOTTOM)

- ▶ Concrete repair
- ▶ New fender installation.
- ▶ Completed works.