

Diesel Cargo System Refurbishments

ASP Ship Management



Replenishment Ship
HMAS Westralia docked
at Garden Island.

HMAS Westralia

PROJECT PROFILE

Client:	ASP Ship Management
Location:	Garden Island
Project Duration:	30 days
Date:	March 2003
Crew Size:	5

AME Pty Ltd successfully completed the refurbishment of various mechanical components associated with HMAS Westralia's Diesel Cargo system.

Prior to the commencement of site works, **AME** worked closely with the client in order to devise, price and evaluated various refurbishment options. This collaboration proved highly beneficial and allowed for the optimisation of the client's allocated schedule and budget.

AME's on-site scope of work was composed of two distinct activities that were run concurrently. The first activity involved the replacement of three (3) defective 250NB gate valves, located at the bottom two diesel tanks and the second involved the fabrication, refurbishment and installation of remote valve actuator components.

Due to the relative age of the vessel, equivalent valves could not be sourced and modern units were not compatible.

Since the modification of the existing pipe was not preferred by the client, **AME** removed the defective valves, took appropriate measurements and had new valves cast and machined to match the old.

The 250kg valves were removed and installed using cross-hauling techniques involving a series of chain blocks and lever hoists.

Photo (top) - One of the three new valves, installed in position awaiting final testing and remedial painting.



AME manufactured new stainless steel valve position indicators, as well as new remote valve operating spindle shafts.

Thirteen (13) spindle shafts were renewed by disconnecting all gearing mechanisms from the valves and then raising the existing corroded spindle shafts approximately 2m. Once raised, each spindle shaft was clamped, cut and a new 1.8m stainless steel shaft welded to the remaining mild steel section using an adaptor sleeve.

Other tasks associated with the refurbishment of remote actuator assemblies included the manufacture and renewal of valve handles, brass gland followers, gland follower flanges and the re-packing of glands.

Photo (middle) - Refurbished assembly.
Photo (bottom left) - Original corroded spindle shafts.
Photo (bottom right) - New valve position indicator nuts.



AME Pty Ltd

Telephone: +61 8 9240 4115
Fax: +61 8 9240 4116
Email: info@amepl.com.au
Web: www.amepl.com.au