

LANDCORP AUSTRALIA AMC FLOATING DOCK 'YARGAN'



Yargan is the Noongar word for Tortoise, this floating dock has the ability to carry heavy vessels to and from land and water. The pontoon base consists of 24 watertight chambers that transfer ballast water for support and positioning. Yargan will lift vessels up to 12,000 tonnes out of the water for service and maintenance and will facilitate the land to water transfer of vessels up to 3,500 tonnes, vital to supporting the Royal Australian Navy (RAN) Collins Class submarine fleet.

Client: LandCorp Australia

Year: 2019

Product/Service: Hydraulics/
Integrated Service

Duration: 12 Weeks

Total Value: \$7.5 Million

Scope of Work

EnerMech performed the Design, Manufacture, Install and Commissioning of new Hydraulic operated Ballast Control System for the AMC Floating Dock (YARGAN).

The Hydraulic System consisted of: Port & Starboard side HPUs, Port & Starboard side Accumulator systems. Port & Starboard side hydraulic control panels.

EnerMech performed the Supply, and Installation of the new 14", 16", 24" and 36" hydraulically operated butterfly valves Installation, pressure testing and Oil Flushing with all associated Hydraulic Pipework.

In addition the removal of 40 off existing 14", 16", 24" and 36" pneumatically operated knife gate valves and associated equipment and controls

Project Delivery

EnerMech Hydraulic Team engineered a complete new Hydraulically operated control system and engineered solutions for installation and the removal of the old pneumatically operated Ballast Control valves, Actuators and associated equipment.

All operations were carried out with dock afloat.

Rope Access personnel utilised for the full scope reducing installation costs & duration.

The project was both a technical and commercial success with additional work scopes awarded as a result of the EnerMech team's performance.

Key Benefits

EnerMech successfully eliminated increasing operational issues with the old ballast system valves and improved reliability and reduced maintenance costs

Hydraulic accumulator systems to smooth the hydraulic pressure and also allow emergency operation of the Ballast Control System in the event of power loss.

Ballast tank valves able to be cycled at the rate of 2 full cycles per minute.

Ballast tank valves automatically and quickly go into fail-safe mode in the event of power loss or loss of control signal

Launch and recovery durations reduced therefore reducing operating costs.

Works completed with no LTIs