

Case Study 220: **25.4m Landing Craft**

SPECIFICATIONS

Waterjet:	DJ260 x2
Engine:	Detroit S60 448 kW @ 2300 rpm
Gearbox:	ZF2000, 3.0:1
Vessel:	25.4m L.O.A 23.5m W.L.L 135 t (full load)
Performance:	10.2 knots (full load)



Royal Australian Navy (RAN) – Amphibious Watercraft

Designed and built by ADI Thales Australia to full Classification Society Standards and to meet the operational requirements of the Australian Defense Force; these six vessels were built to transport a battalion sized group of soldiers, equipment and stores from ship to shore. With a cargo capacity of 65tonnes, bow and stern ramps the vessel can carry a range of vehicles from Land Rovers to Leopard tanks. Waterjets were ultimately specified for their outstanding maneuverability and extreme shallow draft capability.

For maximum service life in this arduous application the **DJ260** waterjets have been specified with stainless steel pump assemblies fitted with 26" (660mm) high volume single stage axial flow impellers. These waterjets provide superior cavitation margins allowing full power application at any load condition and also at zero speed for maximum possible thrust during docking and station keeping maneuvers at sea. Doen's pre-fabricated aluminium intake duct installation combines maximum vessel integrity with simple installation.

The fully integrated hydraulic systems operate the waterjet reverse and steering functions. Twin PTO driven hydraulic pumps supply the tank mounted control valve banks for reverse function and steering functions. All steering and reverse cylinders and their associated hydraulic lines completely mounted inboard.

The vessel is fitted with Doen's **ECS-200** Control System. Configured for twin engine - twin station; this electronic control system provides primary control of engine throttle and gear command with the waterjet steering and reverse functions. Additionally the system provides the operator with all necessary monitoring, alarm and back-up control functions.

The waterjets and control system are supplied to **DNV** ✕ 1A1 LC Crew R1 (aus) E0.