

Case Study 211: **25m Patrol Boat**

SPECIFICATIONS

Waterjet:	DJ260 x2
Engine:	MTU 12V 396 TE84 x 2 1980 hp @ 1900 rpm
Gearbox:	ZF BW460 1.689:1
Vessel:	25.0m L.O.A 22.6m W.L.L 73.0 tonne
Performance:	35 knots



Malaysian Marine Department– 25m High Speed Patrol Boat

Four vessels of the Bintang Class were constructed for the Malaysian Marine Department to conduct Surveillance and Patrol activities in and around Malaysia's Archipelago of protected Islands. Designed by Singapore's Shiptech and built by Mara Shipyard in Malaysia this vessel is powered by twin MTU V12 marine diesel engines coupled to the **DOEN DJ260** waterjets. It can deliver a maximum speed of 35knots and cruise at 30knots. Carrying 12crew it has an operational range of 612Nm.

These **DJ260** waterjets have all stainless steel pump assemblies. Fitted with 26" (660mm) single stage high performance axial flow impellers; these waterjets deliver excellent high-speed and long range cruise efficiency. 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 bank with for reverse function. A stand alone steering pump is driven directly off the engine. All steering and reverse cylinders and their associated hydraulic lines completely mounted inboard.

The vessel is fitted with Doen's Electronic Control and monitoring System. Configured for twin engine - four station; this electronic control system provides primary control of engine throttle and gear command with the reverse functions. Twin levers providing combined bucket and throttle control with steering by conventional helm wheel. Additionally the system provides the operator with all necessary monitoring, alarm and back-up control functions.

The waterjets and control system were supplied to **DNV class**.