DJ105 Waterjet

Performance Reliability Simplicity

Case Study 116: **Force Protection Boat**

SPECIFICATIONS

Waterjets:	**DJ105 (Twin)**
Engines:	**Cummins 6BTA 5.9M 315hp @ 2800 rpm**
Gearboxes:	**Twin Disc MG 5075 SC**
Vessel:	**9.8m L.O.A 8.5m L.W.L 8.5 tonne**
Performance:	**33 knots**

SeaArk, Ram series RHIB, for Force Protection Role.

Twin **DOEN DJ105** waterjets propel this aluminium RHIB 9.8m designed and built by SeaArk, in Arkansas USA. This vessel is primarily designed for Force Protection activities, which include harbour and homeland defence, coastal surveillance, and special missions.

Power is provided by twin Cummins 6BTA's 315hp diesel engines, which are coupled to the DOEN waterjets through Twin Disc marine transmissions. A reduction ratio is used to optimise the waterjet impeller selection and the gearbox also provides the vessel with disengagement and a back flushing capability.

The DOEN DJ105 10.5-inch (267mm) diameter high volume axial flow impeller provides excellent cruise capability and fuel economy with un-compromised top speed under varying load conditions.

The DOEN balanced steering nozzle gives fast, precise response with minimal input force. This is simply controlled using a conventional manual hydraulic steering system with inboard cylinder , which is mechanically connected to the waterjets inboard steering tiller. This provides the vessel with exceptional easy control at both high and low speeds. A simple mechanical tie bar is used to connect the waterjets providing synchronized steering at all times.

The DJ105 waterjets are fitted with DOEN's Jogstick Reverse System (JRS); an electro hydraulic control system that provides non-follow up jog lever control of the waterjets reverse buckets. An analogue indicator is used to show the reverse bucket position. This robust, simple and cost effective system remains very popular with operators in remote and rugged use applications.

DOEN PACIFIC PTY. LTD.
33 Venture Way Braeside 3195
Victoria, Australia

Tel: +61 3 9587 3944
Fax: +61 3 9587 3179
Email: inquiries@doen.com