

Case Study 130: **Fishing Boat**

SPECIFICATIONS

Waterjets:	DJ140Z (Twin)
Engines:	Yanmar 6KYM-ETE 650hp @ 2200 rpm
Gearboxes:	N/A direct drive
Vessel:	15.0m L.O.A 13.5m LWL 20 tonne
Performance:	30 knots



A 15 metre Jet Cat Crab Boat

This aluminium 15m Catamaran boat, propelled by twin **DOEN DJ140** waterjets, operates as a purpose built fishing vessel. Used specifically for fishing Blue Swimmer crabs, the vessel operates as a day boat requiring a large deck area for hauling and working the fishing pots. The owner selected waterjets for their maneuverability, efficiency, higher speeds and the total purchase cost when compared to installing gearboxes and propellers.

Power is provided by twin Yanmar 650hp diesel engines, which are directly coupled to the DOEN DJ140, 14.0-inch (356mm) diameter high volume axial flow impellers. They easily propel the vessel to its top speed of 30 knots and provide a very economical cruise of 24knots. The other key benefit of the high volume axial flow waterjets is their ability to carry load with minimal loss of performance; something that was very important for the role of this vessel and this type of fishing.

The DOEN balanced steering nozzle gives fast and precise response. They are controlled using a conventional helm power, assisted hydraulic steering system. Inboard cylinders are mechanically connected to the waterjets inboard steering tiller. This provides the vessel with exceptional easy control at all speeds and especially when maneuvering alongside a moving ship for pilot transfer. A simple mechanical tie bar is used to connect the waterjets thereby providing synchronized steering at all times.

The DJ140 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 typically in remote loaction and heavy duty applications.