# DJ290 + DJ350 Waterjet

Performance **Reliability** Simplicity

## Case Study 263: **44m Motor Yacht**

### SPECIFICATIONS

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|---|---|
| **Waterjet:** | **DJ290 x2 + DJ350B x1** |
| **Wing Engine:** | **CAT C32 ACERT x2**<br>**1343 kW @ 2,300 rpm** |
| **Cntr Engine:** | **Vericor TF50 GT x1**<br>**3590 kW @ 16,000 rpm** |
| **Vessel:** | **44.0m L.O.A**<br>**39.7m W.L.L**<br>**200t (laden)** |
| **Performance:** | **36 knots** |


### **44m High Speed Motor Yacht** – Italy

This unique vessel was configured with triple waterjets to provide both long range cruise performance and high-speed sprint capability. Running on two CAT C32 wing engines and **DOEN DJ290** waterjets, the vessel can cruise at up to 20knots and travel up to 1000 nautical miles. The central **DOEN DJ350** booster jet and gas turbine can be engaged for high speed running. With all engines running this vessel can travel at speeds up to 36knots. The wave piercing bow form and extreme length to beam ratio provides excellent sea keeping allows high speeds to be sustained in even very rough weather conditions.

Both the **DJ290** and **DJ350** waterjets have been specified with stainless steel pump assemblies fitted with high volume single stage axial flow impellers. These waterjets provide excellent high-speed efficiency with superior cavitation margins at lower speeds and cruise conditions. Doen's pre-fabricated aluminium intake duct installation combines maximum vessel integrity with simple installation.

Each **DJ290** has its own fully integrated hydraulic system providing steering and reverse control. All of the hydraulic equipment including cylinders hydraulic and associated hose connections are inboard mounted. All hydraulic pumps are directly driven from the gearbox PTO's.

Vessel propulsion control is managed using Doen's own **CAN BUS - Control** system configured for twin engine - twin station. The main station uses twin Rotary Speed Control Units (Kwant) for control of engine throttle, waterjet steering and reverse functions. The Second station is fitted Doen's **eDock** joystick control system. This provides a single joystick lever control that simultaneously actuates and controls waterjets and engines for precise and intuitive low speed maneuvering control.

The waterjets and control system are supplied to **RINA** C ✠ Hull • Mach Ych (MCA)**.**

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