

IRON DOVE – Compact, HVO-fuelled tug with muscle



Shipbuilder:.....**Med Marine Eregli Shipyard**
 Designer:.....**Robert Allan Ltd**
 Vessel's name:.....**Iron Dove**
 Owner/Operator:**Svitzer**
 Country:.....**Australia**
 Flag:.....**Australia**
 Total number of sister ships
 already completed:.....**4**
 Total number of sister ships
 still on order:.....**0**
 Contract date:.....**Unspecified**
 Delivery date:.....**February 2025**

Delivered shortly after the new year, tugboat *Iron Dove* was specifically designed with the capacity to handle exceptionally challenging operations. This innovative vessel stands out not only for its operational capabilities and power but also for its propulsion technology.

At the heart of the powertrain are high-speed 3516E 2,350kW 6-Turbo main engines, manufactured by CAT, which operate using hydrotreated vegetable oil (HVO) as fuel – a sustainable choice, requested by the customer, Svitzer. The operator has already made the switch to HVO for its fleet of tugs operating in and around London, UK.

As Turkish boatbuilder Med Marine notes: "The use of HVO fuel enables operators to achieve greater environmental sustainability by reducing overall fuel consumption. In addition to using this fuel, thanks to the SY-Drive thruster units developed by Schottel and the Caterpillar 6-Turno 3516E main engines with huge torque values, two propellers can be operated with a single engine."

The powertrain is strong enough to permit a bollard pull of 80tonnes, despite a relatively compact length of just 28m. Med

Marine adds that *Iron Dove* is the first tugboat produced in the Europe, Middle East and Africa (EMEA) region to feature Caterpillar's 6-Turbo 3516E main engines paired with SY-M propulsion, "setting a new benchmark in tugboat innovation".

The tug has also been developed to relay data-driven services, such as operation observation, performance assessments and onboard high-speed data processing, to the operator for real-time condition analysis. "Local data recording in a ring buffer ensures that no critical information is lost, even during internet disruptions," says Med Marine.

TECHNICAL PARTICULARS

Length, oa28.4m
 Length, bp25.65m
 Breadth, moulded13m
 Depth, moulded5.4m
 Gross tonnage<500
 Displacement785tonnes
 Design, draught4.175m
 Design, deadweight220tonnes
 Lightweight564tonnes
 Deck space (total)60m²
 Deck capacity4tonnes/m²
 Bollard pull80tonnes (minimum)

Propulsion
 Main engine(s):
 Number of engines2
 MakeCaterpillar
 Model3516E
 Output of each engine2,350kW

Gearbox(es):
 Number of gearboxes2
 MakeSchottel
 ModelSRP 490 SY-Drive

Propeller(s):
 Number of propellers2
 MakeSchottel
 ModelSRP 490 SY-Drive
 Number of blades4
 Speed1,800rpm
 Fixed/controllable pitchFixed
 Open/nozzledNozzled

Winch(es):
 Number of winches1
 MakeIbercisa
 Capacities250tonnes brake holding force

Other deck machinery/
 equipmentTowing hook

Bridge electronics:
 Radar(s)Furuno X-Band Radar
 AutopilotSimrad AP70 Mk2
 GMDSSA3
 GPSFuruno GP-170
 Chart plotterMaxsea Time Zero
 Engine monitoring systemCaterpillar

Onboard capacities:
 Fuel oil155m³
 Fresh water20m³
 Sullage6m³
 Ballast water33m³

Complement:
 Number of crew8
 Number of passengers0
 Number of cabins5

Classification
 Classification societyBureau Veritas
 NotationsI ✱Hull
 •MACH ✱AUT-UMS,
 Escort Tug, Firefighting
 Ship 1 With Waterspraying,
 Unrestricted Service, IWS

IRON DOVE

