



# GE LM2500+G4 Marine Gas Turbines Power FREMM Frigates

GE LM2500+G4 marine engines will power 20 new European Multi-Mission FREMM frigates, marking the first application in the marine sector of this gas turbine.

Through Avio Aero, a GE Aviation business and a GE Marine Systems Supplier, the LM2500+G4 gas turbines will power 10 ships for the Italian Navy, eight ships for the French Navy, and one ship each for the Egyptian and Royal Moroccan navies. Other international navies are considering the FREMM frigate for use in their fleets.

The LM2500+G4 gas turbine are manufactured at GE's Evendale, Ohio, facility. For the FREMM program, Avio Aero assembles the gas turbine into a propulsion module produced at its Brindisi, Italy, industrial plant. The propulsion system includes a sophisticated turbine control system entirely developed and manufactured by Avio Aero.

## LM2500+G4 Gas Turbine

The LM2500+G4 marine gas turbine is the fourth generation of the LM2500 marine gas turbine. Its main features are increased power (17%) compared to the third generation LM2500+, the same high availability and reliability and the same high efficiency in excess of 39%.

The increase in power is derived from a combination of a 6% increase in airflow, higher exhaust gas temperatures and a higher pressure ratio. To date, GE has on order or has delivered more than 300 LM2500+G4 gas turbines.



GE LM2500+G4 gas turbine

Shown is *Bergamini*, the first FREMM frigate delivered to the Italian Navy (photo courtesy of the Italian Navy).