



## **MAN Engines for Indian Navy Stealth Frigates**

### **MAN Diesel & Turbo receives order for 14 engines for Indian Navy**

Copenhagen,  
16/05/2016

Construction of the first ship is expected to start by early 2017 with handover to the Indian Navy by 2023. The project scope includes 7 P-17A frigates, each equipped with two MAN 12V28/33D STC engines. The building yards are Mazagon Dock Shipbuilders Ltd. (Mumbai, India) with 4 vessels and Garden Reach Shipbuilders & Engineers (Kolkata, India) with 3 vessels. MAN Diesel & Turbo will deliver engines and auxiliaries, commissioning, documentation, training and spare parts.

The 28/33D STC represents MAN cutting-edge technology. Featuring robust and reliable engineering with long overhaul intervals and a maintenance-friendly design, the 28/33D STC also feature a competitive specific fuel oil consumption. Having the possibility to carry out all maintenance work up to major overhaul without removing the engine from the vessel further widens the operational window of the vessel and reduces maintenance efforts to a minimum.

Lex Nijsen – Head of Four-Stroke Marine – MAN Diesel & Turbo, said: “We are very proud of this major order for the Indian naval market. It also represents a breakthrough in India for the MAN 28/33D STC. The vessels will be built with new modular construction technique to reduce construction time. A significant share of the scope of supply will be sourced locally and the majority of the engines will be assembled and tested at MAN factory works in Aurangabad, India.”

The vessels itself will generally be equipped with state-of the-art technology in order to provide a major advantage to the Indian Navy in terms of anti-submarine warfare capabilities. The Indian Navy is one of MAN’s long-term customers and is operating a remarkable number of engines on different vessels like submarines, fleet tankers and also frigates in its fleet, which all are being serviced by MAN Primeserv.

The project evolved from the “Make in India” initiative of the Indian Government. As MAN has already produced other engine types in its Aurangabad factory in India for over 25 years, it had the setup ready for localization of its most advanced naval engine. By contributing to the plans of

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the Indian Government, MAN has once more shown its commitment to one of its most valued long-term customers.

### **Vessel Details**

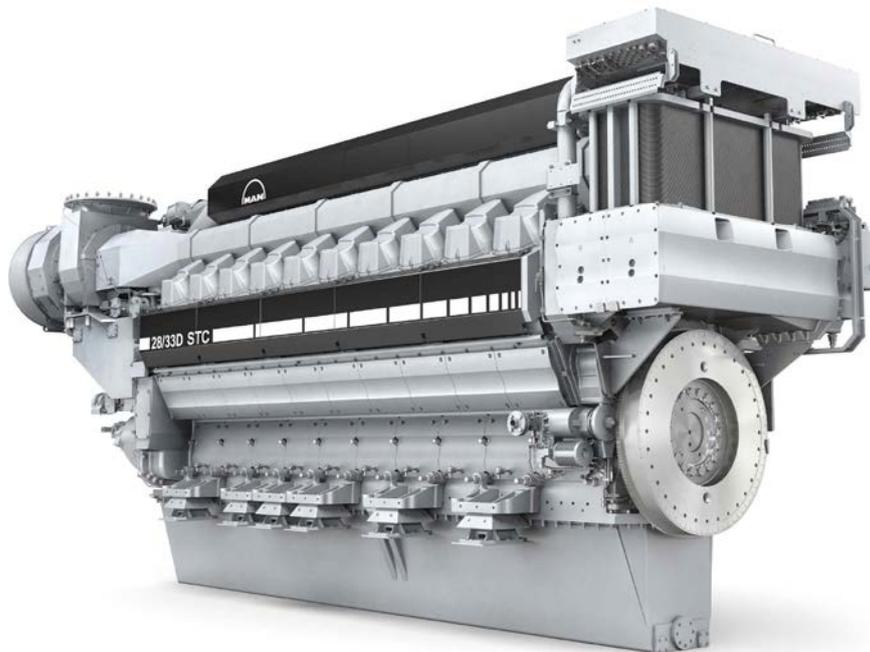
- Type: Guided-missile frigate
- Displacement: 6,670 tonnes
- Length: 149 m
- Beam: 17.8 m
- Draft: 5.22 m
- Depth: 9.9 m
- Crew: about 150

### **MAN 28/33D STC – Benefits at a glance**

- Most powerful engine in its class and proven in service
- Low maintenance costs due to long intervals and on-board maintenance
- Robust design for high availability
- Capable of continuous low load operation
- Low signature

### **General Engine data for MAN V28/33D STC**

- Engine cycle: four-stroke
- Turbocharging system: MPC – TCA33
- No. of cylinders: 12
- Bore: 280 mm
- Stroke: 330 mm



*A picture of the MAN 28/33D STC engine*

**About MAN Diesel & Turbo**

MAN Diesel & Turbo SE, based in Augsburg, Germany, is the world's leading provider of large-bore diesel and gas engines and turbomachinery. The company employs around 15,000 staff at more than 100 international sites, primarily in Germany, Denmark, France, Switzerland, the Czech Republic, India and China. The company's product portfolio includes two-stroke and four-stroke engines for marine and stationary applications, turbochargers and propellers as well as gas and steam turbines, compressors and chemical reactors. The range of services and supplies is rounded off by complete solutions like ship propulsion systems, engine-based power plants and turbomachinery trains for the oil & gas as well as the process industries. Customers receive worldwide after-sales services marketed under the MAN PrimeServ brand.

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