In a class of her own

The tasks of the Turkish Navy are varied. Along the 8,300 kilometers coastline of the Turkish Republic, the Turkish Navy ensures the safety of waterways and protects the territorial waters and exclusive economic zone. Since the region is frequently struck by earthquakes, the Navy is also prepared for humanitarian operations. They participate in numerous stabilization and peacekeeping missions on an international scale, for example off the coast of Somalia and in the Gulf of Aden. In order that these tasks can be fulfilled, the Turkish fleet is continuously modernized.

As HEYBEL ADA (F-511) is launched during the ceremony held on September 27, 2008 in Istanbul Naval Shipyard, all eyes are focused on this remarkable ship. With her compact design and stealthy look, the corvette gives an idea of what she will be able to achieve in operation. Her crew is proud of their “Milli Gemi (National Ship)”. HEYBEL ADA (F-511) is the lead ship of a class which has been designed, built and outfitted with maximum local content.

The MILGEM Class Corvettes are designed for operation in littoral waters and furnished with stealthy technology. Application of many signature-reduction measures makes them hard to detect. They are also equipped with Turkey’s most sophisticated platform and combat systems, weapons and sensors, which make them one of the most modern vessels of their class worldwide. Turkish Prime Minister Erdogan insisted on launching the lead ship personally during a ceremony.

CODAG with more than 30,000 kW
The centerpiece of the vessel with a specified top speed of 29 knots is a CODAG-type propulsion system (Combined Diesel and Gas Turbine) supplied by MTU. Two 16V 595 engines with a power output of 4,320 kW each and a 23,000 kW LM 2500 gas turbine provide power for two controllable-pitch (CPP) propellers via a Renk gearbox and ensure reliable operation of the corvette. While the two diesel engines provide power for cruising speeds on a regular patrol trip, switch-in of the gas turbine enables the vessel to fulfill the high speed requirements. The CODAG propulsion system is controlled and monitored by an MTU Calossum MC automation system.

A long tradition of MTU engines
Since the first German vessels with Maybach and Mercedes-Benz engines were supplied to Turkey in 1967, a large proportion of the ships and submarines used by the Turkish Navy and other governmental authorities such as the coast guard have been equipped with MTU power systems. These include Mine hunting vessels of the Aydm class (Lead ship “Alanya”) with two MTU 8V 396 TB84 diesel engines each, Kılıç patrol boats and the new 1,700 t search and rescue vessels of the coast guard featuring Series 1163 main propulsion systems. Moreover, two MTU 16V 4000 M70 diesel engines with a total power output of 4,640 kW (6,310 hp) will be installed in landing craft for transporting tanks and vehicles (LCT’s) currently being built at the Turkish AD_K shipyard in Istanbul. These landing craft are destined to transport troops and technical equipment by sea to their operating site, to safeguard supplies and to land tanks and other vehicles at inaccessible coastal areas. To support humanitarian missions, they can also transport urgently needed supply goods and clearing equipment such as excavators and bulldozers. Technical training of the crew, maintenance and logistic support for the propulsion systems will be provided by MTU Turkey.

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HEYBEL ADA (F-511) is the lead ship of the MILGEM class. She was launched in September 2008 and is to enter service in 2011.
The MILGEM class corvettes are equipped with an MTU CODAG-type propulsion system. During normal patrols, propulsion power is provided by the diesel engines; switch-in of two gas turbines enables the vessel to fulfill higher speed requirements.

The vessels will be equipped with Turkey's most sophisticated platform and combat systems, weapons and sensors, making them the most modern vessels of their class worldwide.