'Hanseatic Explorer'

Luxury training ship from Germany

In November 2004, Bremen-based shipping company Harren and Partner commissioned Fassmer with the development, design and manufacture of a new luxury training ship, the 48-metre 'Hanseatic Explorer'.

The design is based upon the 42-metre fishery research ship 'Solea', which was built by Fassmer in 2004. As a round frame with great depth and good sea-keeping characteristics, the single-screw vessel already corresponded to a large extent to the wishes of the owner, however interior requirements demanded that the length be increased to 48 metres and the width to 10.40 metres.

The power is provided by a single MaK-engine for a speed of 13.2 knots. For safety reasons, but also for training purposes, all essential ship operating systems were designed redundantly.

With the supplies of fuel and water it is possible to achieve a range of 5,000nm at a cruising speed of 12 knots.

A powerful anti-rolling installation lends the ship a more stable ride in bad weather. The entire new construction was built under the supervision of Germanischer Lloyd and bears the class notation + 100 A5 E3 "Training Vessel" + MC AUT E3.

Equipment includes a 4.2-metre rescue boat and a 5.3-metre Zodiac. The rescue boat is lowered by means of a marine crane that is also used for loading and unloading the ship.

The interior was conceived for total of 30 persons, including 12 passengers, 12 trainees and six crewmembers. Available to the travelling passengers are a saloon with a bar area, fitness room and sauna, but they are also free to go into all other areas of the ship.

The power plant is based on a moderately fast running four-stroke diesel engine, a MaK 8M20, with a capacity of 1,360kW at 900rpm. Power is transmitted through a Reintjes gearbox to a Schottel controllable pitch propeller with a diameter of 2,500mm. A synchronous machine manufactured by AEM of the type SE 400 M4As serves as a redundant power drive, which can be used both in PTO as well as in PTI mode. This main exciter assumes the main energy supply to the ship, but can also be used for the propulsion both as an individual drive and as a booster engine together with the main engine. During the test voyage a speed for the vessel of 13.4 knots was measured. In PTI mode (booster-operation) the maximum speed achieved was 14.1 knots. Under the diesel-electrical drive only, in the so-called PTH mode (power take home) the 'Hanseatic Explorer' achieved an impressive 8.4 knots. In order to improve manoeuvrability, Schottel bow thrusters with a capacity of 300kW have also been installed.

In addition to the main exciter, the supply of electrical energy is also assumed by two diesel generator aggregates as well as an emergency and port aggregate of the same size. The generator sets have an automatic synchronisation and load distribution and are equipped for continuous parallel operation. Caterpillar C 9 DITAs serve as generator engines, with a capacity of 215kW at 1,500rpm. Essential ship operating systems include two Hatlapa starting air compressors, two fuel transfer pumps as well as an MDO and a lubricating oil separator with pre-heaters.

The technical equipment for radio and navigation purposes corresponds to that of the trading ships operated by the owner. An additional radar screen/ECDIS is available to both the trainees and passengers.

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