



13M “TEIST” PATROL BOAT

DIESEL POWER	FPT-IVECO N67-45 331kW/ 2100 RPM X 2
PHT MODEL	PHT700A101X 2 ratio 1.7
E-POWER	37kW E-MACHINES X 2

TEIST – HYBRID PATROL AND ESCORT BOAT FOR PORT OF OSLO WITH ESCO POWER’S PARALLEL HYBRID PROPULSION SOLUTION

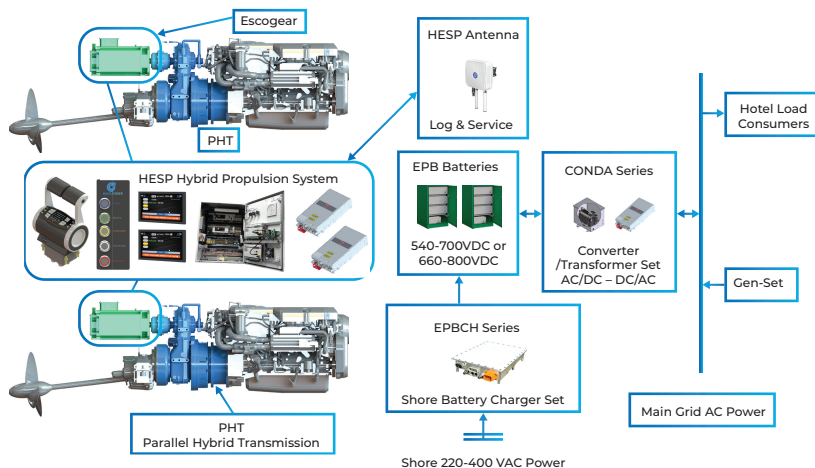
Built by Norwegian builder Maritime Partner 13M patrol boat named Teist will be used by the Oslo port authority for surveillance duties as well as escorting of larger vessels sailing in the harbour.

The boat was designed and built in fulfilment of the Oslo Port Authority's requirement for a new general support vessel that is also capable of low-emission operations. The boat is powered by two FPT-Iveco diesel engines, each with 331kW, twin HamiltonJet HTX30 units and received Escos Power Parallel Hybrid Transmissions PHTs, and 37kW battery-powered E-motors.

Teist is capable of sailing at four to five knots for up to three hours on battery power alone while the main diesel engines will use biodiesel to ensure emissions are in accordance with strict international environmental regulations.

The option to sail at low speeds is a critical ability for duties that require long endurance rather than quick response, such as escorts and inspections being conducted in the busier areas of the port. This then frees up the more powerful diesel propulsion for use in time-sensitive situations like interceptions of smugglers and assisting in emergencies.





Parallel Hybrid Solution by Esco Power

- PHT Parallel Hybrid Transmission, to be installed between marine diesel engine and marine gear, brings diesel and electric power on one driveline
- HESP Hybrid Electric Solution Package, Complete hybrid command, control & command system, including E-machines, frequency drives, control & command screens, command station, mode select panel, software with various modes: diesel, electric, automatic, generation single and cross-mode, includes commissioning
- HESP Antenna Optional feature to ensure remote access & system updates and service
- Escogear Flexible Coupling to connect PHT secondary output to E-machine
- EPB Batteries Battery system, including BMS with operational voltage matching offered E-machines: 540-700VDC or 660-800VDC, with rack or frame mounting solution, power & communication cables, includes commissioning
- EPBCH Series Battery Shore Charger Set
- CONDA Series Converter/Transformer Set, to install between our EPB Battery System and the vessel grid 230/400VAC, making the batteries system available for on-board consumers as to charge it with Gen-set & shore charger connected to the on-board grid