

Interview with Antti Yrjänäinen (Elomatic)



The project immediately filled us with enthusiasm to meet the proposed demands and goals. We formed a team consisting of young, innovative, and talented naval architects and experienced project engineers. The cooperation with Vittorio Garroni of Garroni Progetti s.r.l. was especially fruitful. In our first brainstorming sessions, we came up with the central innovations for the concept. The most important feature of the concept design, in my opinion, is the innovative container distribution based on the closed main deck and the integrated loading system below it.

This improves the ship's structural strength and allows faster and more flexible loading. The more flexible loading system makes it easier to manage the ship's stability, which means that the ballast can be reduced or even eliminated.

Another significant innovation is the ship's power generation. The sails are striking, even though they deliver only a small part of the power requirement. The retractable solar cells that cover the container area likewise produce only part of the required energy. However, as they are emission-free energy sources, they are highly significant in reducing the ships' total emissions. Fuel cells that have been modularized into container-sized units are the ship's main energy source.

The concept serves as a platform for the technologies presented and their use in a future ship.

Interview with Vittorio Garroni (Garroni Progetti s.r.l)



What a pleasant surprise to be involved in the NYK Super Eco Ship 2030 project. A dream for a marine designer.

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After just looking in my archives, I drew out many samples of modern sailing devices for commercial vessels: blending a drop of junk sail tradition with my personal knowledge of modern sailing yachts' design, I had enough material to start shaping some sailing features.

A few elements to point out:

- The deck load is enclosed in a foldable shell for weather protection and energy production by solar cells.
- The hull load is enclosed in a sound body and is self-loading, with no shore equipment needed.
- The hull is split into modules for faster port turnovers: a technical challenge but an interesting feature.
- Crew accommodation and machinery are located around the bow for better navigation visibility, deck load protection, improved aerodynamics, and safer ship accessibility: port pilot or crew boarding is operated by a telescopic cage protruding from the deck cantilever platform.

NYK Super Eco Ship 2030 is still a dream-ship. We need a few more years to deepen research on the sun, wind, cells, and energy to finalize a real ship that will hopefully be profitable both for business and the environment.

Interview with Masato Nobuhara (MTI)



MTI participated in the NYK Super Eco Ship 2030 project in response to a request from the NYK Cool Earth Project Office. With the cooperation of Elomatic, a Finnish marine-technology consulting firm, and Garroni Progetti s.r.l, an Italian ship designer, we needed six months from last September to finish the project.

Our team incorporated the progressive technologies that may be embodied in 2030 in the ship, though they cannot be implemented immediately.

We started by studying new future technologies and, finally, we could realize our ideas in the model ship. I really enjoyed all the steps in the work with our staff members.

NYK Super Eco Ship 2030 is not only the ship which expresses our dreams of the present, but also the ship which expresses our enthusiasm to realize our dreams in the future.