ENGINEERING WHAT COMES NEXT



ANDREA AGRUSTA EXPLAINS HOW EXPERTISE, VISION AND TRUST CAN TURN ENGINEERING THINKING INTO SOLUTIONS THAT ANTICIPATE THE CHANGING NEEDS OF SHIPYARDS AND OWNERS

Andrea Agrusta returns to Only Speed in this issue to continue our conversation with NavalHEAD. This time, the focus widens to the changes reshaping the marine industry and the value of international exchange.

Andrea, which change, more than any other, is redefining the way boats are designed and experienced today?

"I believe the most significant change is the shift from design focused on the individual product to a more advanced vision, in which every decision helps define the overall experience of being at sea. Today, aesthetics, comfort, performance and efficiency must coexist in an increasingly sophisticated balance.

At NavalHEAD, we believe that being at the forefront is not simply about adopting new technologies. It means anticipating needs, challenging established solutions and turning engineering thinking into tangible innovation. This requires expertise, vision and trust: the client's trust in the designer, and the confidence inspired by solutions capable of proving their value at sea."



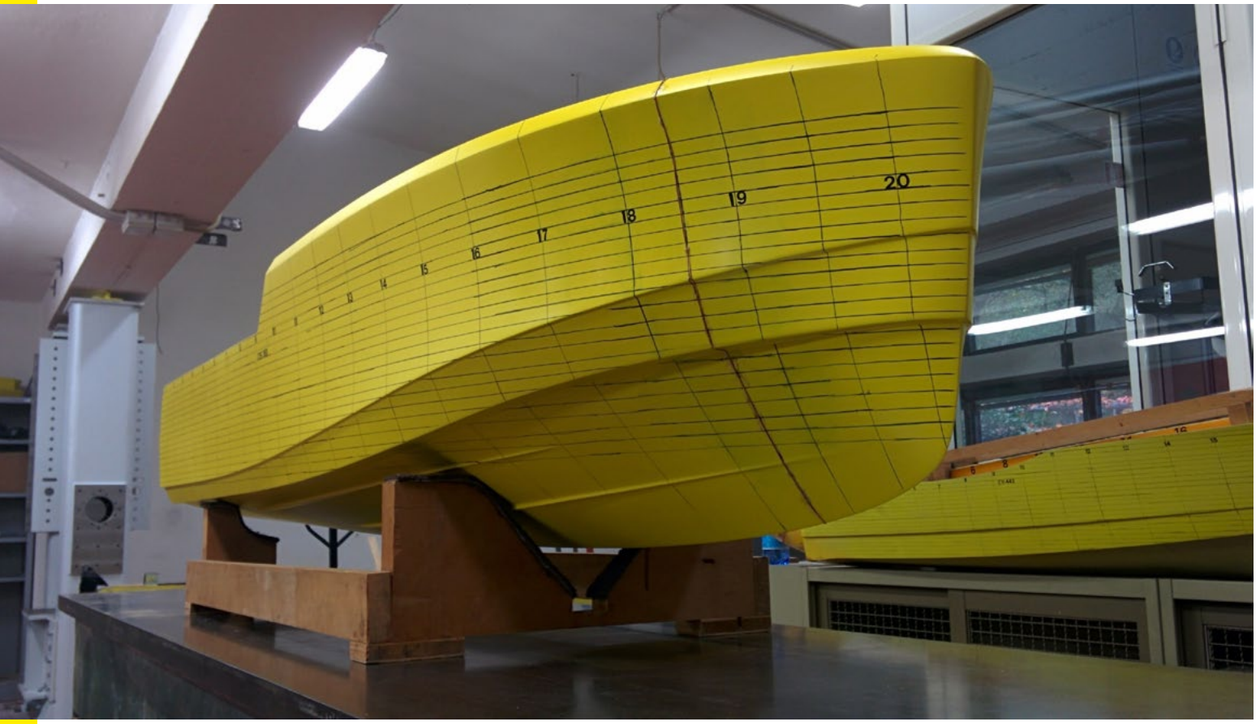
In your approach, a boat is a single system in which hull, weight, structures, propulsion, comfort and the construction process must work together. What cultural shift does the industry need to move from optimising individual components to designing the entire experience and the vessel's full life cycle?

"The cultural shift lies in moving beyond design developed in separate silos and adopting a systemic approach that connects every element of the boat from the earliest stages. A change to the hull, weight distribution or structure can affect performance, safety, comfort and construction costs. Understanding these interdependencies before construction begins is therefore essential.

At NavalHEAD, we work precisely on this integration through engineering analysis, simulation and continuous dialogue with everyone involved in the project. Being at the forefront means exploring new possibilities, but also knowing how to validate them. It means having the courage to rethink solutions and the rigour required to make them reliable. The result is a boat designed as a coherent system, optimised not only for construction, but also to perform at sea and stand the test of time."

Your role at NavalHEAD combines engineering expertise, strategic development and an international outlook. How does a design studio's work change when its aim is not only to answer a brief, but to anticipate needs that shipyards and owners have not yet translated into precise requests?

"NavalHEAD works as a technical partner alongside designers, shipyards and owners, sharing objectives, addressing critical issues and identifying the most effective solutions. Our role is not simply to execute a brief, but to contribute actively to the project, bringing





DESIGNING THE BOAT AS ONE SYSTEM

engineering expertise and analytical capabilities to solve problems and optimise construction choices.

We work to improve the boat's efficiency across every aspect, pursuing the highest standards of safety and performance in line with the project's objectives. This requires constant dialogue with all the professionals involved, the ability to anticipate potential issues and the mutual trust needed to make complex decisions. For us, engineering thinking acquires value when it becomes a shared tool. We do not simply work for the client, but with the client, combining everyone's expertise to achieve a better result."

A boat's efficiency now encompasses consumption, performance, materials, durability, maintenance and end of life. Which criterion should take priority if sustainability is to become concrete and measurable throughout the vessel's life cycle?

"The priority should be the vessel's overall efficiency, assessed throughout its entire life cycle. Reducing weight, optimising the structure and correctly sizing onboard systems make it possible to improve consumption and performance without compromising safety or comfort. The construction process and the vessel's eventual end-of-life disposal have become equally important and should be planned from the preliminary design stage.

Sustainability must begin with the design and translate into measurable results. It is not a declaration of intent, but the outcome of informed, validated engineering decisions focused on durability."

One of the latest entries in NavalHEAD's international exhibition calendar is METSTRADE 2026 in Amsterdam, a global meeting point for marine technologies, materials and systems. How does this exchange fit into NavalHEAD's strategy for the years ahead?

"METSTRADE is a key event because it brings together expertise, technologies and visions from around the world. It provides an opportunity to meet international suppliers and partners with whom we share projects, experiences and objectives, building collaborations that make a tangible contribution to the evolution of the industry.

We believe that progress in the marine industry stems from the ability to work together, combining different areas of expertise and turning new technologies into genuinely applicable solutions. For NavalHEAD, being at the forefront means maintaining an open outlook on the international market, cultivating relationships built on trust and engaging with those who invest in research and innovation. Working alongside outstanding partners is essential as we move towards an increasingly advanced marine industry, in which engineering thinking becomes the driving force behind new design possibilities and delivers tangible benefits in safety, performance and efficiency."

NavalHEAD

FROM HULL DESIGN TO END OF LIFE, EVERY DECISION SHAPES PERFORMANCE, SAFETY, COMFORT AND THE OVERALL EXPERIENCE AT SEA THROUGH A TRULY INTEGRATED APPROACH

