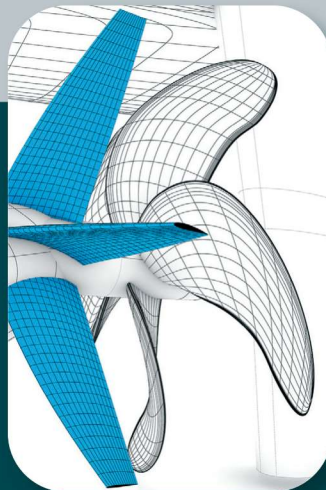


ENERGY SAVING DEVICES

Design & Manufacturing

The maritime industry is facing significant challenges in terms of energy consumption and environmental impact. Implementation of energy saving technologies and newly designed propellers help shipowners and managers to reduce energy consumption, optimize propulsive efficiency and improve the vessel CII.



ENERGY SAVING TECHNOLOGIES

Our skilled engineering team utilizes advanced CFD analysis to assess and customize the optimal combination of ESDs for maximum vessel performance, offering comprehensive support from selection to installation.

UPSTREAM

Pre-duct

CFD optimized nozzle to improve the inlet flow to the propeller.

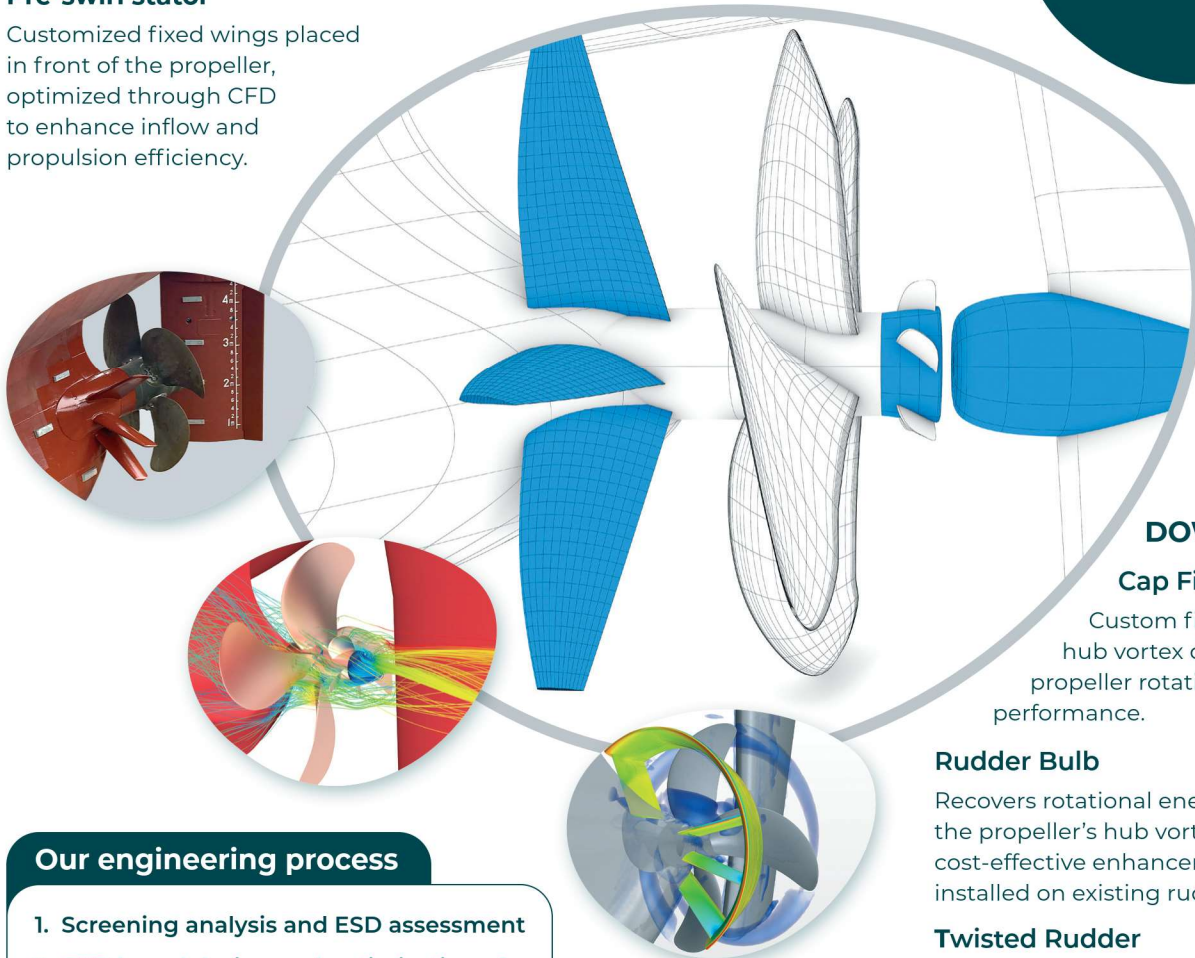
Pre-swirl stator

Customized fixed wings placed in front of the propeller, optimized through CFD to enhance inflow and propulsion efficiency.

PROPELLER RETROFIT

Comprehensive CFD optimization for the entire propeller system, maximizing performance and fuel savings.

Improve your
CII&EEXI



DOWNSTREAM

Cap Fins

Custom fins to reduce hub vortex during propeller rotation, improving performance.

Rudder Bulb

Recovers rotational energy from the propeller's hub vortex, offering a cost-effective enhancement as it is installed on existing rudder.

Twisted Rudder

Asymmetrical design, with or without a bulb, to recover swirl energy, enhance maneuverability, and reduce drag.

Our engineering process

1. Screening analysis and ESD assessment
2. CFD based design and optimization of ESDs and propeller retrofit
3. FEM mechanical design
4. Class certification
5. Manufacturing
6. Installation supervision
7. Sea trials

Advantages

1. **Tailored Solutions:** Each device is customized based on rigorous assessments using CFD optimization and FEM analysis. Our validated methodology ensures suitability to the client's needs and vessel specifications.
2. **Comprehensive Support:** We provide engineering support throughout the entire process, including classification, manufacturing, installation supervision and sea trials.
3. **Stand Out Performance:** We leverage our own foundry and collaborate with top-tier suppliers to deliver products that stand out in performance and reliability.



CONTACT US: vicusdt.com – info@vicusdt.com – [@vicusdt](https://www.linkedin.com/company/vicusdt)



SPAIN
Baixada Gándara, 16
36330, Vigo
+34 886 113 547

USA
2500 CityWest Blvd
Houston, TX 77042
+1 713 614 5403

MEXICO
Av. la Marina, 6115
82103, Marina
Mazatlán, Sinaloa
+52 669 139 0857

 **VICUSdt**
grupo emenara