



Sensus 42 SD

Efficiency under the
Surface

Ferry Shipping Summit · Athens 8 October 2026
UM Shipyard · Türkiye · www.umshipyard.com



You Already Know The Problem.

So Let Me Put Three Of Your Own Numbers On The Table, Not Mine.

36%



of operating cost is fuel

IN A CALM YEAR

01

€1,200



per tonne of MGO

SPRING 2026 · WAS €500-600

02

€40m



EU ETS · one operator, one year

DOUBLE THE YEAR BEFORE

03

AND THE FLEETS THAT CARRY THIS COST ARE GETTING VERY OLD.

Source: XRTC, Greek coastal shipping review, 2026.



And the answer is not available yet.

One national example — the same shape repeats across Europe's fleets.



€5bn

Greece · 25-year transition bill, 326 vessels
€3bn capital · €2bn operating

€1.8bn

Greece · announced funding, undeployable
EU Modernisation Fund + national

“No bankable projects. No deployment mechanism. No clarity on which fuel.”
The money exists. The infrastructure, the regulation and the fuel do not — and none of them arrive on a timetable anyone here controls.



An aerial photograph of a coastal town and a large shipyard. The town is built on a hillside with many houses. The shipyard is located on the water's edge, with several large yellow cranes and industrial buildings. A large ship is being built or repaired in the water. The sky is blue with some clouds.

WHICHEVER FUEL WINS **IT HAS TO MOVE THE SAME SHIP**

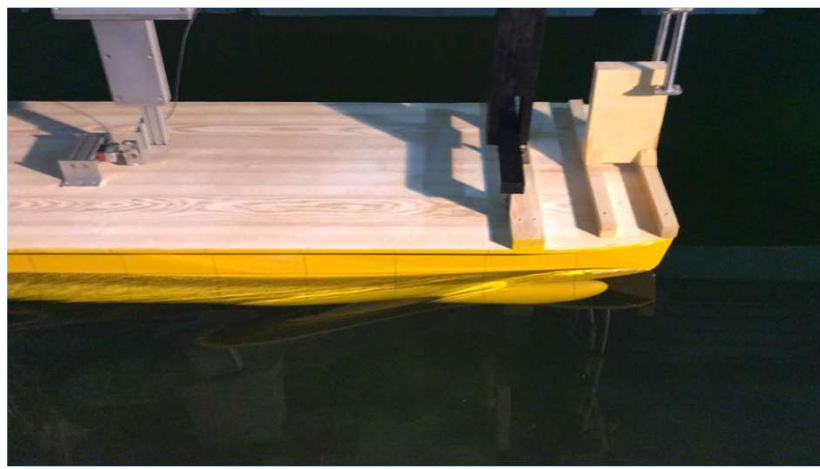
A kilowatt the hull never
asks for is one nobody has to decarbonise.

It waits on no shore connection, no bunkering chain and no regulatory clarity. And it makes every pathway that follows — hybrid, electric, alternative fuel — more viable, by lowering what the ship needs.



One hull. Two outcomes.

You may have seen this shape before — and heard that it burns fuel.



THAT REPUTATION BELONGS TO HOW PARTICULAR SHIPS WERE EXECUTED, NOT TO WHAT THE FORM CAN DO.
OURS WAS DEVELOPED CLEAN-SHEET, WITH HULL GEOMETRY AS THE PRIMARY VARIABLE.

Less wave-making

less resistance

less power demanded

Less area at the waterline

less motion

Iterative CFD, then model-scale tank testing at Istanbul Technical University. Machinery is arranged on the main deck — the submerged hulls stay slender and uninterrupted.



On an exposed route, motion is not a comfort question.

It decides whether the service runs at all.

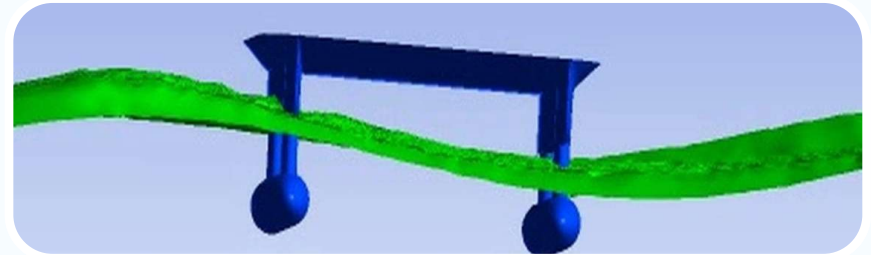
0.03 g

vertical acceleration RMS · ISO 2631-3
8-hour exposure, 2.0 m significant wave height

**Undisturbed passenger comfort up to 2.0m
Significant wave height.**

small-waterplane hull is a sea keeper by nature — the same geometry that lowers the power lowers the motion.

Operational restriction : 3.6 m Significant wave height



**Where a route is exposed, the marginal days are
not spread evenly through the year.**

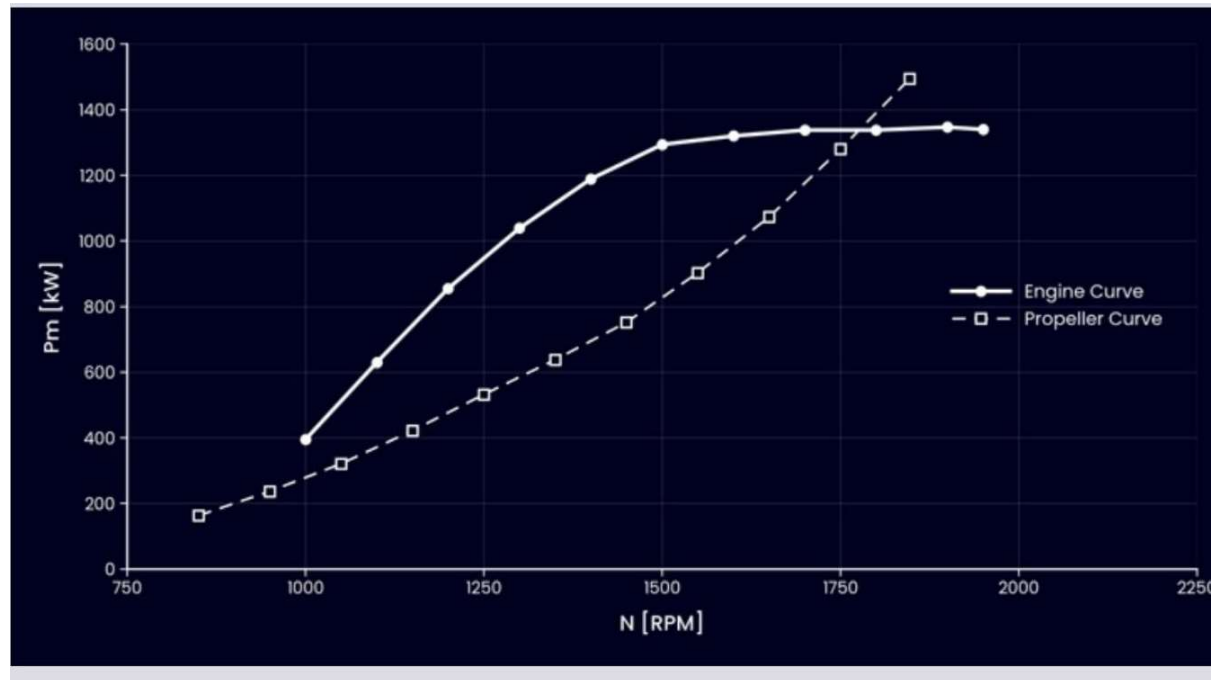
They cluster in the shoulder months — the weeks a schedule is built to hold. A cancelled rotation costs a full day of revenue, and the connecting service behind it.

FOUR ACTIVE FIN STABILISERS ARE FITTED FOR ADDITIONAL DAMPING — THE SEAKEEPING COMES FROM THE HULL.



Power demand, across the range.

Main engine power required against speed, with installed power for reference.



Installed: $2 \times 1,340 \text{ kW} = 2,680 \text{ kW}$ - above demand at every speed shown.

Source: SENSUS 42 SD leaflet — engine–propeller matching analysis (FEA/propulsion programme).

ENGINEERED BY UM SHIPYARD



SENSUS 42 SD

LAUNCHED AUGUST 2026. ON TRIALS IN THE GULF OF İZMIT.



41.90 m
length overall



12.80 m
beam



350
passengers



555 GT
gross tonnage



2 × 1,340 kW
Yanmar 12AYM-WGT



34.0 kn
service speed



460 nm
range



RINA
classed

GET THE HULL RIGHT,
AND EVERYTHING ELSE FOLLOWS.

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