



Enabling Efficient Storage
& Transportation of Energy

Large-scale LNT A-BOX[®] type LNGCs

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LNT MARINE

Enabling Efficient Storage & Transportation of Energy

What we do

- **LNT Marine** is a technology and service provider specialized within **liquefied gas tanks** and **cryogenic insulation**.
- We develop technology and provide **design & engineering**, **supervision** and **support** as well as **contracting services**.

Business segments

CARGO CONTAINMENT



LNG + NH3 FUEL



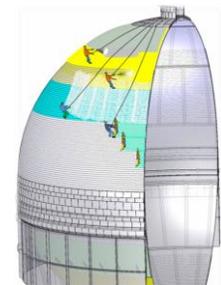
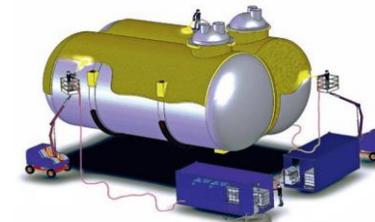
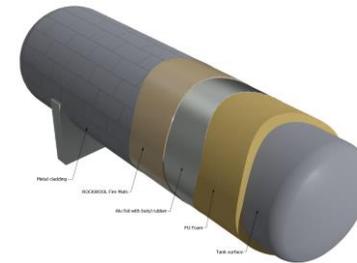
GAS CARRIER INSULATION



Repair services



Products & services



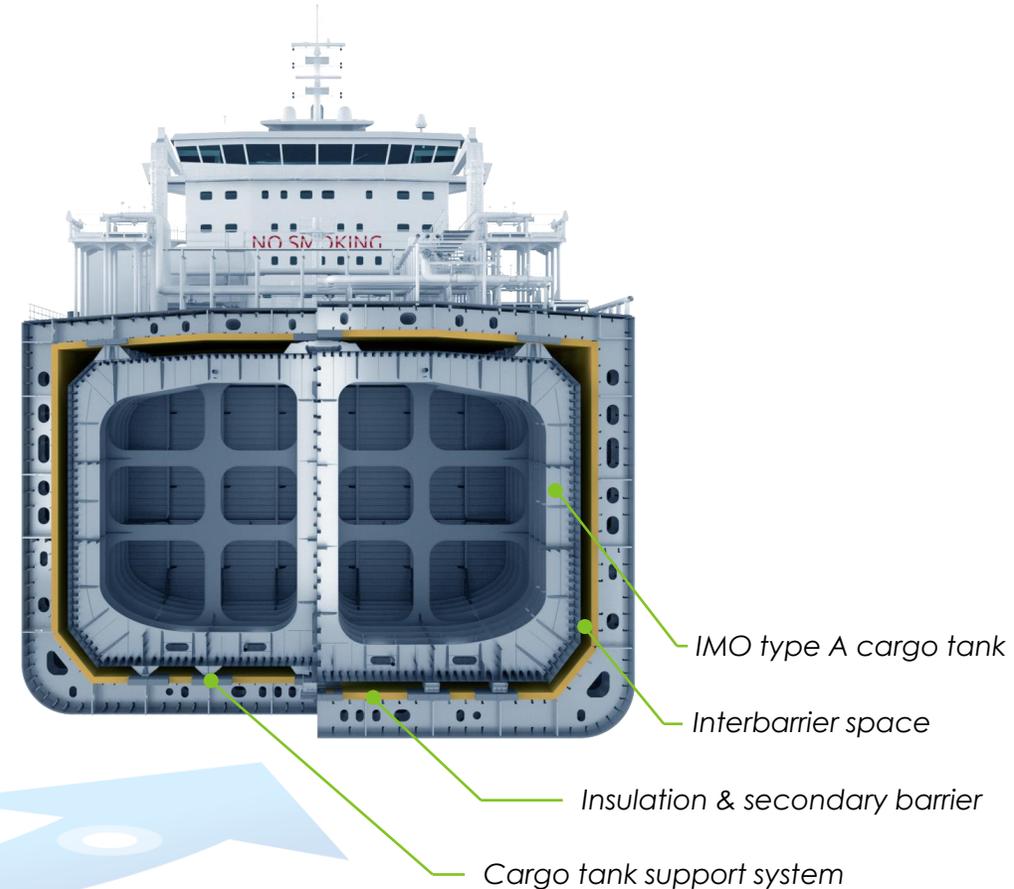
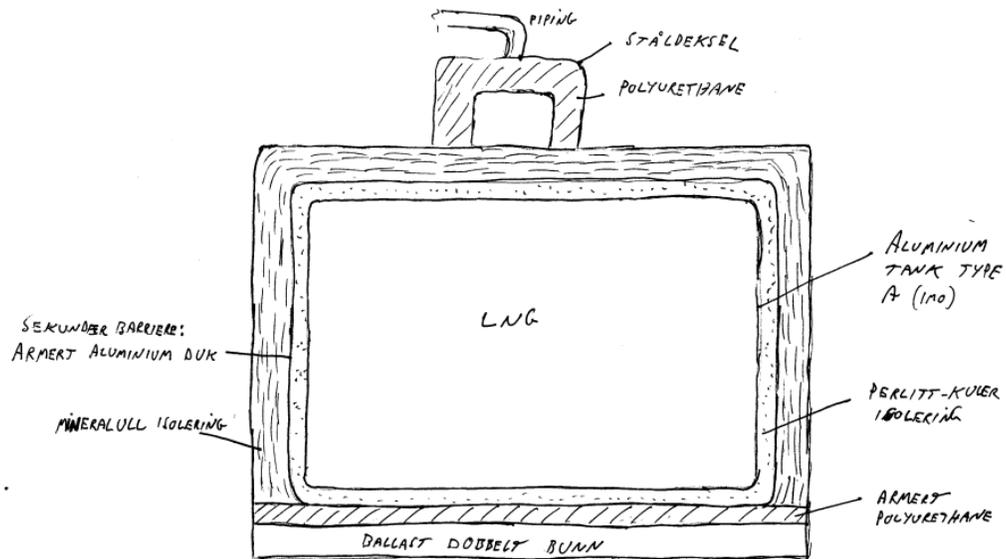
A NEW CARGO CONTAINMENT SYSTEM – THE LNT A-BOX®

From concept to reality

The idea

- 1) Develop a **simple** and **efficient** cargo **containment system** for medium to large scale **LNG**.
- 2) A system that can **enable more shipyards to build the LNG carriers**.

An IMO independent tank type A without insulation, inside an insulated hold space.



SUCCESSFUL PROOF OF CONCEPT

The first LNTA-BOX[®] type vessel, the 45,000m³ LNG carrier LNG Jia Xing (ex. Saga Dawn)

LNTA-BOX[®]
Flexible | Efficient | Robust



Building capacity & costs



Flexibility & efficiency



Robust & safe



SCALING-UP – JOINT DEVELOPMENT PROJECT

Large-scale LNG carrier design



175,000m³ LNT A-BOX TYPE LNG CARRIER

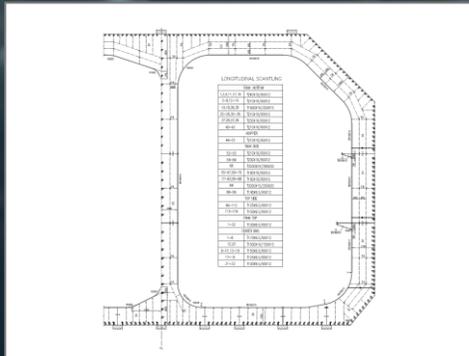
Ready for the market

CSSC 上海船舶研究设计院

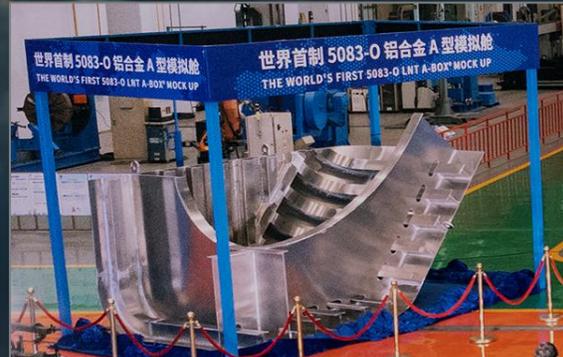
APPROVAL IN PRINCIPLE



Aluminum tank design



Alu tank mock-up



FEM analysis cargo hold

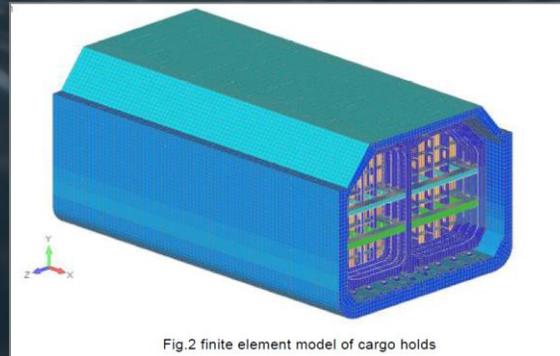


Fig.2 finite element model of cargo holds

Model testing



175,000m³ LNT A-BOX[®] TYPE CARRIER PROPOSITION

Challenging the current status quo and the de-facto monopoly in the LNG industry.



Low fuel consumption

Lower resistance than existing tonnage

Market leading BOR

From 0.07 %/24h

Robust & safe

Strong self-supporting structure

No filling limitations

Sloshing mitigated with swash bulkheads

Lower gross tonnage

2% less, lower canal tolls and port fees

Accessible barriers

Visual control of both barriers

Lower life cycle cost

High residual tank value and lower OPEX

THANK YOU

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