

# Navi da bunkeraggio e Depositi Galleggianti *Bunkering Vessels and Floating storages*

soluzioni per l'approvvigionamento di GNL  
*solutions for LNG supply*



## Introduction

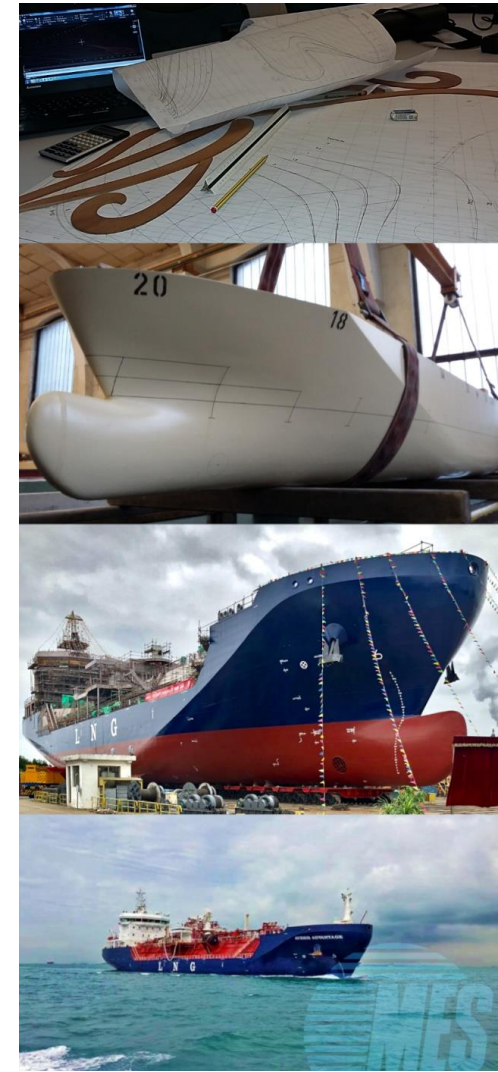
M.E.S. is a ship design Company specialized in:

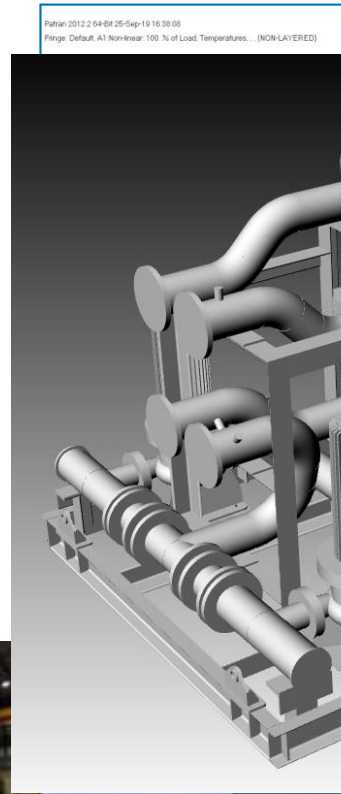
- chemical tankers and bitumen carriers
- gas carriers (LNG, LPG & Ethylene)
- LNG bunkering vessels
- LNG powered ships (Design, Consultancy & Construction Survey)

M.E.S. provide engineering services also for cruise vessels to primary Clients in this market



Image courtesy of MSC Cruises





## Some of the Gas Carriers built with MES design worldwide



# STOLT – AVENIR - 7500 m<sup>3</sup> LNG bunkering vessels

Excellent Performance

[Avenir Advantage MES Design](#)

**You** 

- Operated by AVENIR
- Chartered to PETRONAS Marine & TITAN LNG
- First STS bunkering in Malaysia
- First dedicated LBV to serve customers in South East Asia



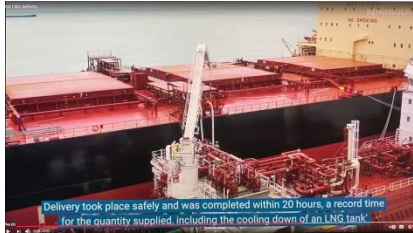
- 2 ships built by KEPPEL Nantong
- 1 M.E. dual fuel Wartsila 6L34DF 3000 kW
- 2 cargo tanks, with 1000 cbm/h cargo pumps capacity and 2 small fuel pumps (1,2 cbm/h)
- Optimization based on BOG
- Design Speed 13,5 knots



## LNG BUNKERING COMPATIBILITY STUDIES



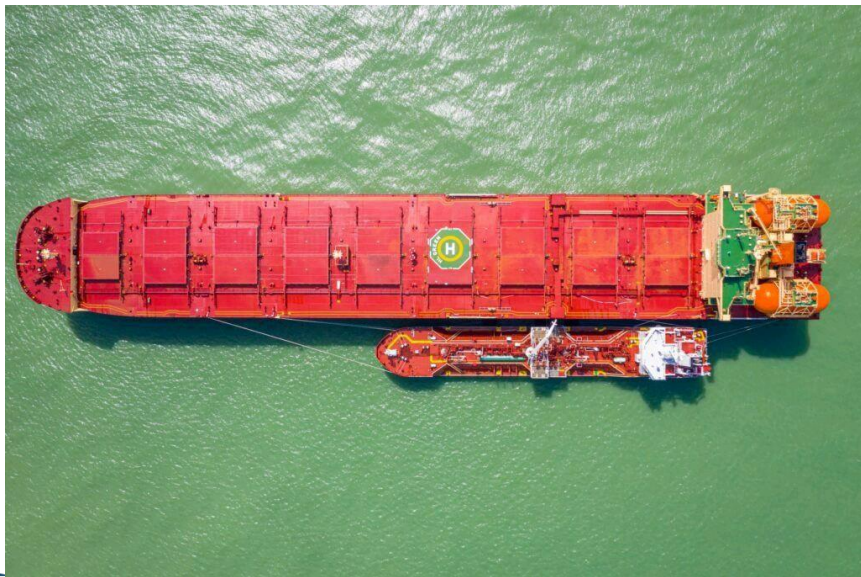
Loading arm  
Flexible hoses  
ERS



Delivery took place safely and was completed within 20 hours, a record time for the quantity supplied, including the cooling down of an LNG tank.



The first LNG bunker delivery to the world's largest LNG powered bulk carrier, the 180k dwt eco-friendly HL Green, on its inaugural voyage.



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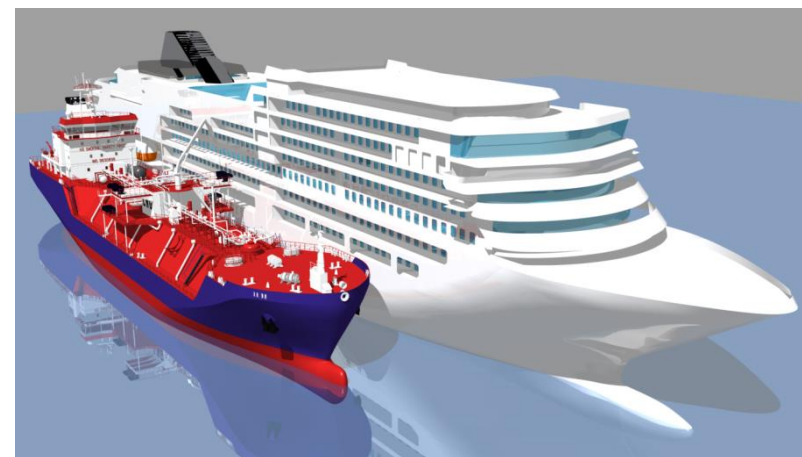
**La coopération au cœur de la Méditerranée**  
**La cooperazione al cuore del Mediterraneo**

## Cooling Down & Bunkering

The 'Avenir Advantage' cooling down and providing LNG to her sister ship the 'Avenir Accolade' before she embarks on her journey to Europe where she will load the first cargo for the HIGAS LNG Terminal in Sardinia.







## Logistic – LNG bunkering facilities

- Tug for port operations LNG Fuel Tank Volume (100 %) : 80 m3 abt.



**POR FESR**  
**2014 2020**  
Friuli Venezia Giulia

OPPORTUNITÀ PER UNA CRESCITA SOSTENIBILE



**TUGA**  
escort Tug Gas  
powered









## THANKS FOR THE ATTENTION

Visit us on the web : [www.mes.it](http://www.mes.it)



[Avenir Advantage MES Design](#)

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