

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



LEAD AUTHOR

Jonathan Blicher
Product Line Developer, Gaztransport & Technigaz

CO-AUTHORS

Julien Boulland, Global market leader - Commercial department - Sustainable shipping, Bureau Veritas Marine & Offshore

OPERATIONAL FLEXIBILITY FOR MEMBRANE TYPE LNG FUELLED VESSELS

For LNG fuelled ships, LNG fuel tanks installed onboard will have a design pressure mandated by the IMO IGF Code. For the Membrane-type technology tanks, the maximum pressure is set at 0.7 barg. In order to gain more operational flexibility, GTT has developed a system of tank that enables the pressure to go beyond, up to 2 barg. This poses technical and regulatory challenges. Bureau Veritas, as a leading classification society, has worked together with GTT on the regulatory aspects.

For a shipowner / shipoperator, offering an increased pressure rating will bring several advantages:

- An increased holding time (with and without gas consumption).
 - More flexibility with regards to high transfer rates and vapour return management,
 - Minimise risk of wasting BOG during low consumption phase or venting BOG in case of emergency situations.
 - The ability to bunker LNG with warmer temperatures (from “lower quality” supply chain) when necessary.
- This paper is presented by GTT and BUREAU VERITAS and will go through the technical studies required to increase Mark III LNG fuel tank pressure ; will detail the intricacies of the associated regulatory approval process, and will present the category of ships for which this technological feature can be applied, with a focus on recent developments on 1barg for medium and large-size LNG fuel tank

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>