New Thermal Insulation Panel for LNG Tank

2020

Kawasaki
SUPER Green Product

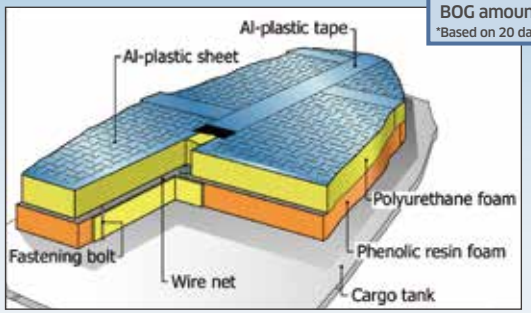
Kawasaki Heavy Industries, Ltd.

Kawasaki
Powering your potential

Improved further thermal insulation performance and achieved top class BOR* in LNG marine industry

Top class low BOR in LNG marine industry is achieved by realizing lower thermal conductivity and increase thickness of Poly-Urethane Foam (PUF) at the same time, as follows;
- Foaming agent of Poly-Urethane Foam (PUF) is changed to Hydro-Fluoro-Olefin (HFO).
- Foaming conditions are optimized.

*BOR : Boil Off Rate, the ratio of natural gas naturally evaporating during voyage



155,000m³ LNGC	Existing product	New Panel
BOR(%/day)	0.08	0.068
BOG amount* (ton) *Based on 20 days voyage	1070	910

-160ton

Product Description

This new thermal insulation panel is developed to apply for our original Kawasaki Panel System.
Kawasaki Panel System is very reliable thermal insulation system and has been applied for more than 60 LNG Carriers since 1981.
Kawasaki Panel system has two layer, one is Phenolic-Resin Foam (PRF) for cryogenic side, the other is PUF for normal temperature side

Features

- Reduce environmental load by changing foaming agent from Hydro-Fluoro-Carbon (HFC) to HFO of which global warming potential is about 1/1,000 comparing with that of HFC
- Appricable for all size of LNG tanks from small LNG fuel tanks for LNG fueled ships to large LNG cargo tanks for large LNG Carriers
- Maintenance-Free in principle after service