

CASE STUDY

LNG vessels generate over 9% fuel savings

LNG vessels generate over 9% fuel savings with Intersleek®

Summary

LNG vessels operate globally, with varying fouling challenges. Typical LNG vessels can consume upwards of 100 tonnes of fuel per day. This means that maximizing hull efficiency and fuel consumption is of high importance.

The dynamics of the shipping industry are currently undergoing a period of change and a lot of vessels are undergoing slow-steaming operations or longer periods of inactivity. As a result, coatings are

required to keep the hulls clean of macro-fouling whilst stationary and enter back into service with no disruption to the in-service performance.

Intersleek has been proven to deliver these efficiencies and many LNG operators have seen the benefits that Intersleek provides for the operations of their fleets. No wonder Intersleek has completed over 500 applications on LNG vessels, which accounts for over 35% of the global LNG fleet.



Challenges

LNG vessels generally trade in very high fouling challenge regions and have historically been difficult to protect from fouling due to their unique operating profile and frequent static periods in high fouling areas. It has been very difficult for LNG vessels to maintain consistent performance up to 60 months. The environmental profile of LNG operators is of high importance, and they are keenly aware of their environmental responsibilities in the carriage of their clean cargo.

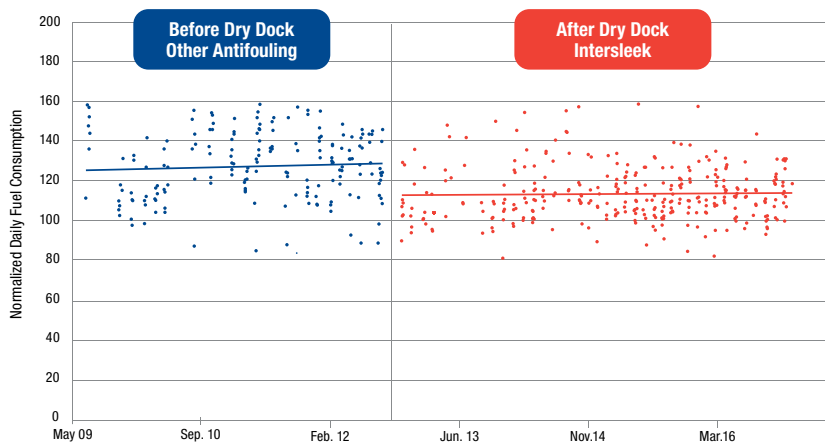
How We Made It Possible

These two charts show how Intersleek 1100SR has maximised the hull efficiencies on LNG vessels.

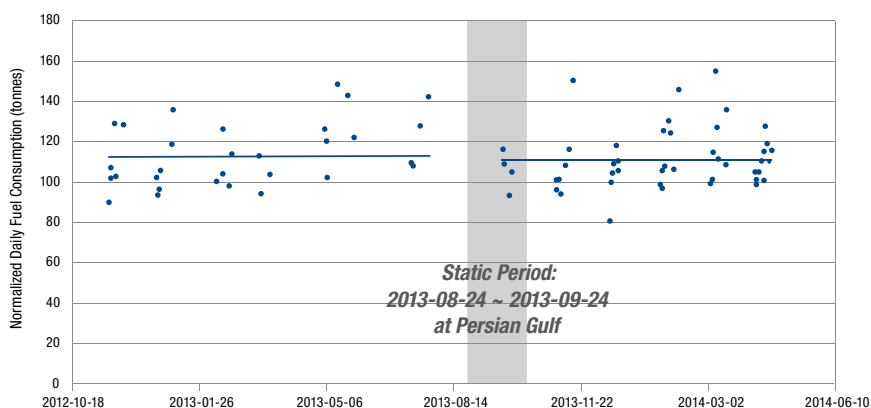
After over 4 years in-service, the excellent performance of Intersleek 1100SR has been maintained, compared to the previous coating system, with over **9% fuel savings** still being maintained.

Even after long static periods of 30 days in high fouling challenge areas, Intersleek 1100SR maintains performance with effective removal of macrofouling and slime; meaning no increase in fuel consumption on entering back into service.

In-service performance

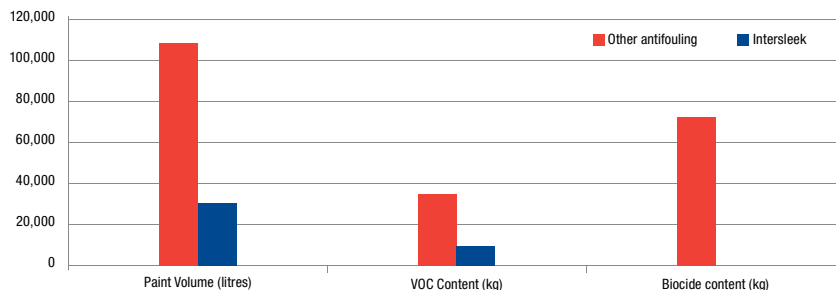


Static performance



Results, Return on Investment and Future Plans

The superior performance of Intersleek 1100SR compared to other coatings, has been demonstrated on LNG vessels. With over \$130Mn of fuel savings and 1.5 Mn tonnes of carbon dioxide emissions saved, it has proven to be a superior coating solution for these vessels. With climate change agendas having far reaching implications on the environment, LNG is seen as key to re-directing the world towards lower carbon emissions in the future. This vision of the LNG industry is in line with AkzoNobel and our Planet Possible approach, in bringing sustainable solutions such as Intersleek to market to help customers achieve their environmental goals.



▲ Compared with other coatings over a 15-year period, a typical LNG vessel can save up to 70% paint volume and reduction in VOC with sustainable environmental profile.

Myth-buster

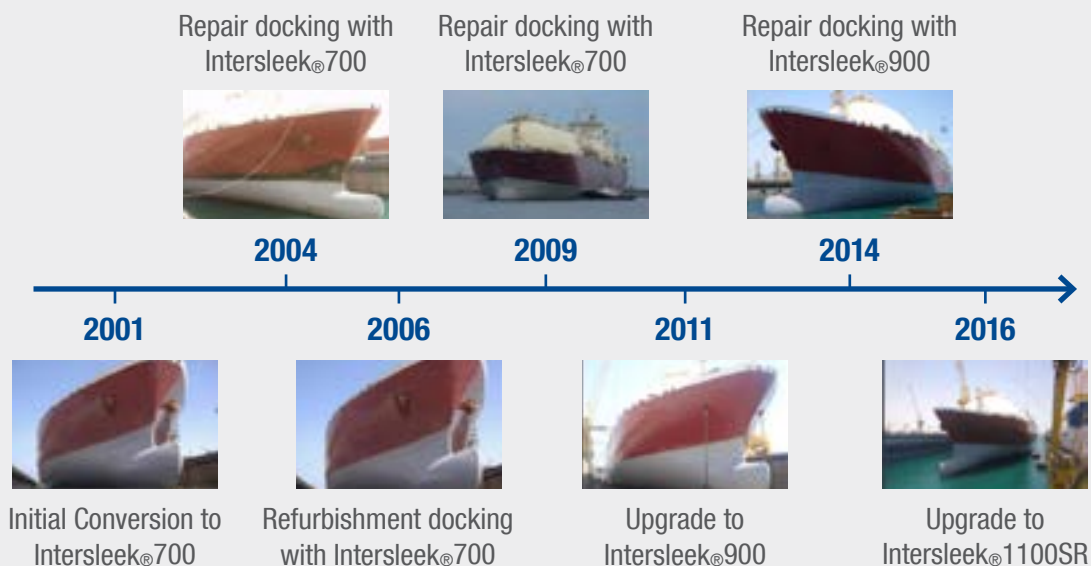
How many times can I recoat Intersleek?

The following two examples show the performance after 15 years which included 3 full recoats without blasting. The low hull roughness and significant fuel savings have been maintained throughout this period.

Docking history for a LNG vessel in the Middle-East



Docking history for a LNG vessel in the Middle-East



Important Notes:

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