SOPass

Ship Operation and Performance Analysis Support System

2022
Kawasaki Ecological Frontiers
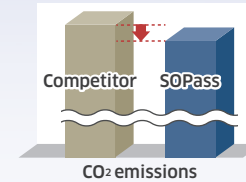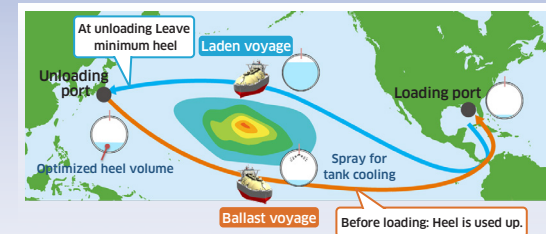**S class**

Initial registration: 2019

Kawasaki Heavy Industries, Ltd.

Weather routing and BOG* management functions significantly reduce fuel consumption and improve transport efficiency

SOPass selects optimum routes under the relevant navigation limitations based on the motion and resistance of the ship and weather forecast information. As a result, equipping ships with SOPass reduces CO_2 emissions an average of 3%.
On LNG carriers, SOPass improves transport efficiency by using a thermal simulation model to estimate BOG volume and the amount of heel required for the next voyage.

* BOG: Boil-off gas, natural gas that naturally evaporates during transport

At unloading Leave minimum heel
Laden voyage
Unloading port
Loading port
Optimized heel volume
Spray for tank cooling
Ballast voyage
Before loading: Heel is used up.

* Heel: A small amount of LNG remaining on board a vessel after unloading LNG cargo that can be used for cooling cargo tanks and as fuel on a ballast voyage.

Competitor   SOPass
3% average reduction
CO_2 emissions

Weather routing

Performance analysis

SOPass
Ship Operation and Performance analysis support system

Maintenance management

BOG management

Product Description

A ship operation and performance analysis support system that helps ships operate efficiently using data analysis and predictive functions that combine data from ships with knowledge of naval architecture

Features

- Main functions: Weather routing, performance analysis, maintenance management, and BOG management
- Customers can select functions to meet their specific needs