Dec 4th, 2019

Kawasaki Kisen Kaisha, Ltd.

Completed Additional Development (Phase-2) of "Kawasaki Integrated Maritime Solutions"

Since March 2016, we have been operating the "Kawasaki Integrated Maritime Solutions" jointly developed with the Kawasaki Heavy Industries Group. After start of operation, we have been working on additional development of the system for purpose of further strengthening its safe and economic operation, which has now been completed. The main items added in this development are as follows:
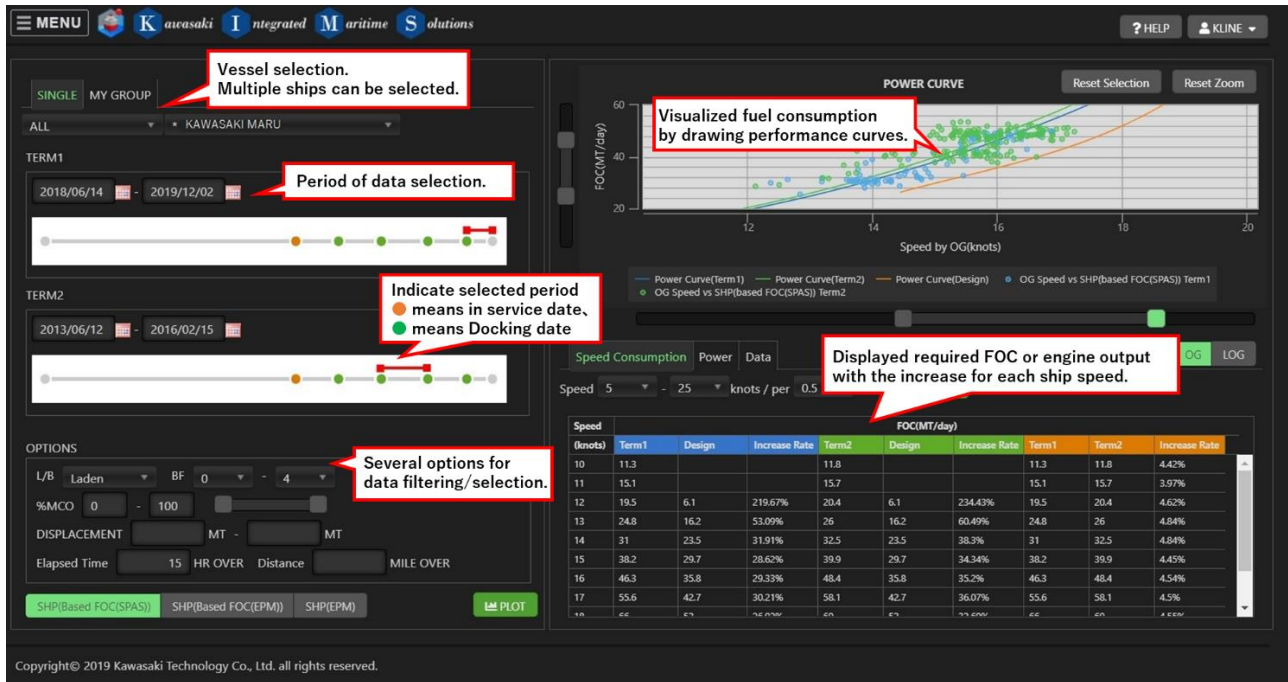
New Items	Purpose	Outline
KPI-Monitor	Safety/ Economy	Automatic calculation & monitoring with alert system for each KPI factors (fuel consumption, main engine output, stand by time etc.) that have been set for each vessel and/or department. This can help to run PDCA for improving our vessel operation.
Performance Evaluation	Economy	Monitoring function for vessels performance with automatic calculation include speed-fuel consumption (or engine load) balance at any time, i.e. before and after docking. Anyone can easily see vessel performance.
Hull Fouling Evaluation	Economy	Hull fouling that is the highest deterioration impact of the ship's performance except weather and sea state can be grasped by this system.
Optimum Trim Calculator	Economy	Calculate optimum trim for fuel save based on past actual sailing data of individual vessels. Prototype has been completed for some ships.
Simplify edition	Safety/ Economy	Extracted major vessel information like ship speed, fuel consumption, ship position, etc. for smartphone.
Optimal navigation support system (upgrade)	Safety/ Economy	Added automatic data transfer function. Voyage plans that are created in ECDIS can be copied into Kawasaki Integrated Maritime Solutions automatically.
Optimized Server configuration	Optimized infrastructure	Optimized server configuration to handle big data (increase number of ships installed with Kawasaki Integrated Maritime Solutions that can respond with high speed calculation).
Data transmission monitoring	Enhanced Administration	A function to monitor reliable data transmission. Automatically informs the administrator when any data transmission from ship has failed.

"K" Line Group will make effective use of this system and will continue to focus on the development of engine plant operation support and trouble prediction diagnosis functions. We will also continue to work on environmental conservation by further safe and economic operations.
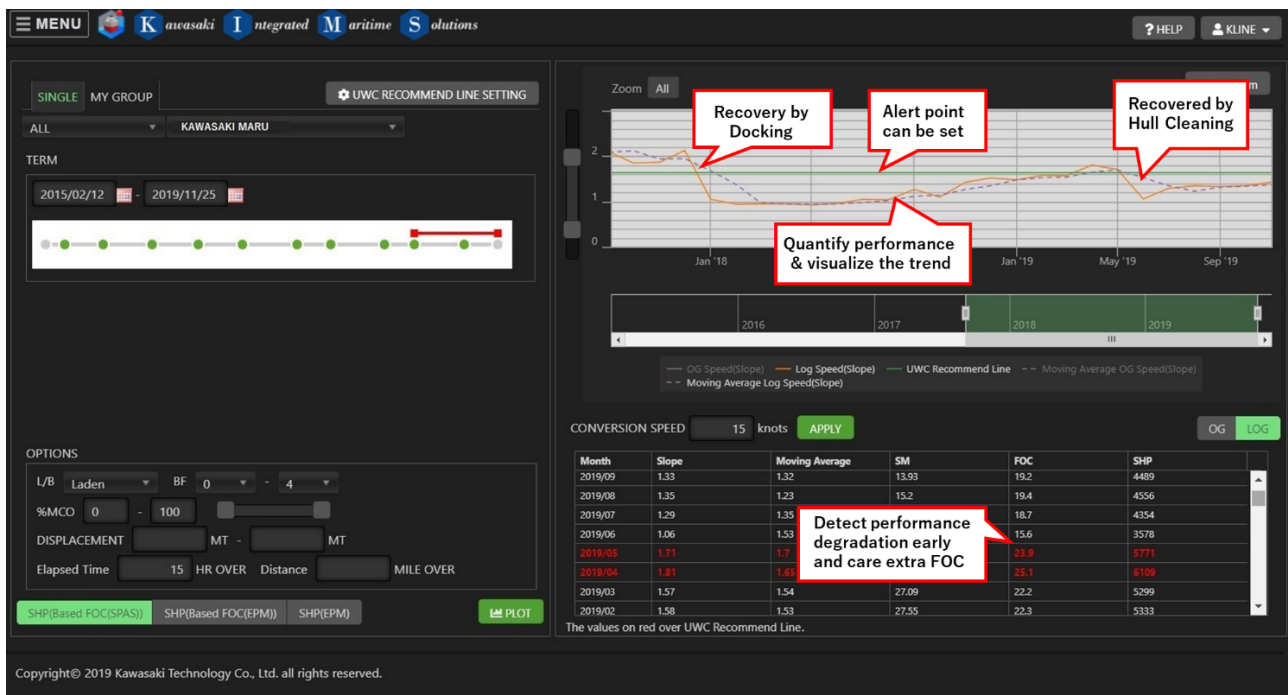
For details on the initial development of "Kawasaki Integrated Maritime Solutions" (Phase-1), refer to the following site: https://www.kline.co.jp/en/news/other/other3295047094663452046.html
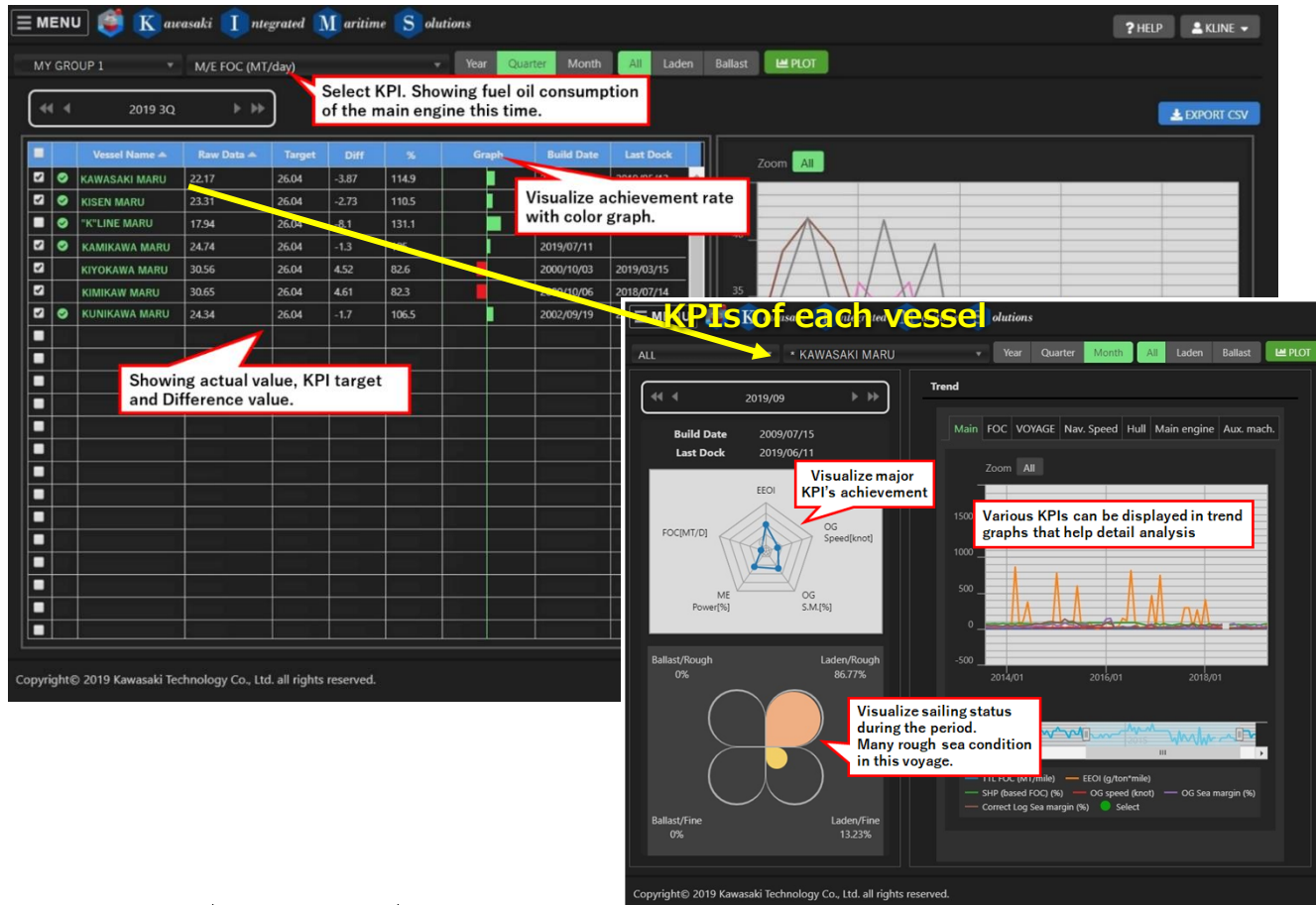
(Screen example)

〈 Performance Evaluation (Speed Consumption) 〉

〈 Performance Evaluation (Performance Trend) 〉

〈 KPI Monitor (Comparative Vessels & Each Vessel) 〉
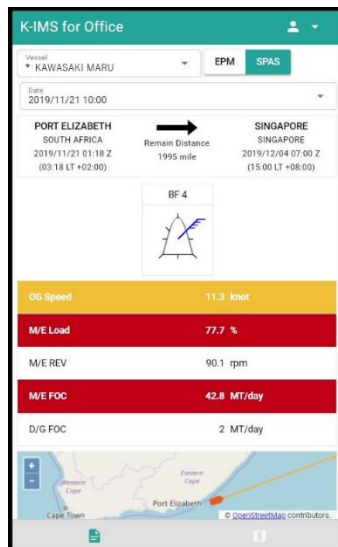

〈Vessel Monitor (for Smartphone)〉

Easy access to latest vessel information under operation by Smartphone.