



# ***Ship Energy Efficiency Online Monitoring System***

## **Service Contents**

Ship energy efficiency online monitoring system is equipped with monitoring equipment such as shaft power meter, fuel flow meter, draft supervising device, etc., and ship-to-shore data communication module. The system integrates multiple functions, including safe load calculation, energy consumption online monitoring, voyage optimization and economic speed calculation. It can realize real-time monitoring of ship floating state and ship fuel consumption, and can evaluate the stability and longitudinal strength of loading conditions in real time when loading at the dock to provide the best loading and operation scheme. During the voyage, its real-time communication can be used to synchronize the ship-shore data, process and deeply analyze the collected data, reveal the navigation characteristics and speed optimization direction of the ship, and provide an economic speed reference scheme.



## Form of Achievements

Ship energy efficiency online monitoring system

## Software Platform/ Technology Platform

None

## Typical Cases / Achievements

According to the ship owner's demand for real-time monitoring of fuel consumption and energy saving and emission reduction during the voyage of the ship in service, we analyzed and determined the architecture and functional requirements of the ship energy efficiency online monitoring system through the investigation of the ship owner and the shipyard, completed the development of the ship energy efficiency online monitoring system. The system realized the real-time collection of draft, speed, fuel consumption, shaft power and other data during the operation of the ship, automatically analyzed and managed the data, and completed the EEOI calculation and statistical analysis. In 2018, the product was successfully installed and used on "JiangHaiZhiDa 1".

