Tracking and Monitoring Fuel for Marine Fleet
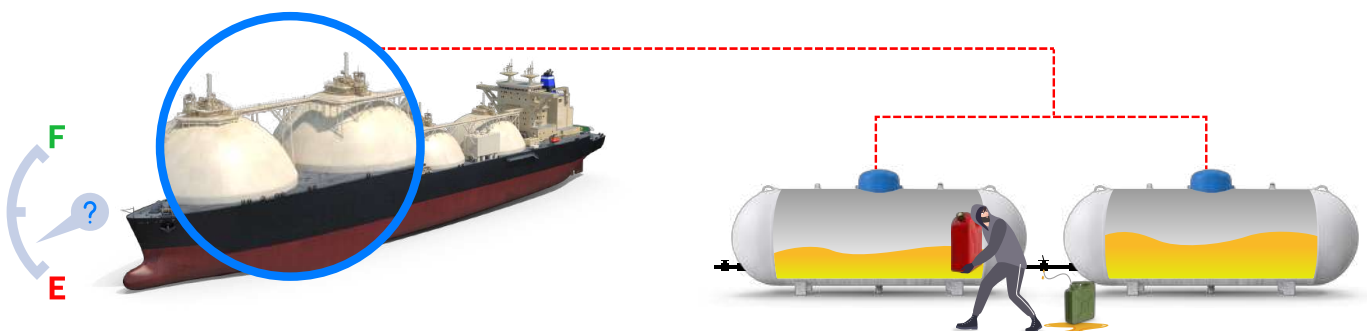
INTRODUCTION

Marine fleet management involves a range of complex tasks, including vessel maintenance, crew management, and fuel management. Fuel is one of the most significant expenses for maritime companies, and managing fuel consumption is critical to reducing costs and improving operational efficiency. Previously, the measurement of fuel levels involved the use of an outdated method that employed a counter and measuring stick, which proved inadequate in providing the necessary precision for accurate measurements.

CHALLENGES

One of the key challenges faced by marine fleet operators is the management of fuel consumption in bulk carriers. Such vessels typically incorporate three to four fuel tanks, each of which is categorized as either primary or secondary. Furthermore, the fuel consumption of the ship's generators and boilers significantly affects the overall fuel usage. With valuable fuel resources on board, the risk of theft and unauthorized usage poses a significant concern for marine operators.

The task of monitoring fuel consumption is complex due to the constant movement of the vessel, leading to frequent fluctuations in fuel levels. To address this challenge, fleet operators require a reliable software solution capable of accurately detecting even minor variations in fuel levels.

SOLUTIONS

Marine fleet owners successfully implemented our highly configurable and advanced fuel monitoring system, which efficiently monitored and managed fuel levels in real-time.

The software provided accurate monitoring of fuel levels with multiple sensors in a single tank for better visibility and control over fuel usage.
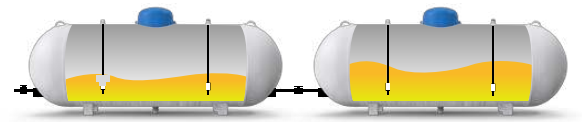
With a powerful algorithm capable of differentiating between fluctuations in fuel levels, fuel transfers between tanks and fuel thefts.

Automated alerts are triggered when fuel levels are critically low, suspicious activities are detected, or deviations from expected consumption patterns occur.

The software offered detailed analytics and reports of all fuel-consuming systems on board the ship, tracking every drop of fuel and providing accurate consumption data.

The software provided accurate fuel consumption reports and data for every single trip, enabling fleet operators to evaluate fuel consumption at any particular speed or engine RPM.

By optimizing fluctuation levels through continuous monitoring, our software has helped identify the total fuel consumption of each engine, generator, and turbine, ensuring efficient fuel usage throughout the vessel's operations.
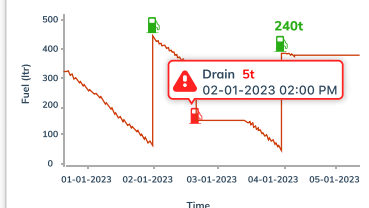
trakzee   **Just Now**

Low Fuel
Honda C73 fuel level is below 10ltrs. Need refuelling

Fuel Abnormal Consumption

Object	Distance	Work Duration	Fuel Consumption	Predefined Mileage		Actual Mileage	
				Distance	Duration	Distance	Duration
Fuel Object 1	510	12:15	41	475	09:30	510	12:15
Fuel Object 2	640	15:00	50	550	12:30	640	15:00
Fuel Object 3	210	05:30	10	200	05:00	210	05:30
Fuel Object 4	970	02:30	78	900	02:00	970	02:30
Fuel Object 5	461	17:15	36	400	16:00	461	17:15
Fuel Object 6	461	16:2					

Fill Drain

Drain 5t
02-01-2023 02:00 PM

240t

RESULTS

Optimize fuel efficiency – By implementing our fuel management software, marine fleet managers were able to monitor fuel usage and optimize fuel efficiency, ultimately saving costs and reducing the environmental impact of the fleet.

Reduce fuel costs - By implementing our software, marine fleet owners have effectively solved fuel theft issues, reducing fuel costs by up to 30%.

RELATED USE CASES

Optimizing Diesel Generator Operations with Fuel Management Software

Fuel Monitoring Software: Addressing Challenges in the Oil and Gas Business