



“It’s hard to ensure regulatory compliance.”

Compliance with the provisions of Annex VI is determined by periodic inspections and surveys.

Under the “NO_x Technical Code,” the ship operator (not the engine manufacturer) is responsible for in-use compliance.

www.dieselnet.com/standards/inter/imo.php

International: IMO Marine Engine Regulations, DieselNet

What if...

- Instead of approximating emissions with inferred and static density, you measured direct mass to prove consumption compliance?
- When you switched fuels, you didn’t have to recalibrate?

Are you able to prove your fleet is in compliance?

Proposed new regulations are appearing at a rapid pace. Often, these regulations are created without consideration of the effort it will take to maintain them or the implications on owners and operators to implement them. Unfortunately, the onus is on you to comply with the often difficult and expensive requirements.

You may be waiting to take action and comply with new regulations until the last minute. But the reduction of fuel consumption is at the heart of all regulations and enforcement will be here before you know it. You must take measures to ensure your fleet is ready to comply with the inevitable changes as well as have a plan in place to offset the costs of the modifications you must incur.

Fleet managers we talk to tell us about challenges like these:

“Environmental regulations are uncertain and complex.”

You know you must decrease your fuel consumption, but emissions regulations are complex and constantly changing. The CO₂ tax is proposed to begin in 2015 and you don’t know if the requirements will morph between now and then or what it’ll take to comply. And sometimes, regulations seem to be in conflict, as is the case with simultaneous NO_x and CO₂ reduction demands. It’s frustrating and expensive to keep up with such regulations.

Navigating the complex and uncertain regulatory landscape is expensive and time-consuming. You must find the most efficient way to comply with strict emissions requirements to ensure you don’t erode your already tight margins.

“Effectively managing fuel switching is challenging.”

Tighter and tighter emissions regulations are forcing you to focus more on switching between different fuels. You must optimize the fuel switching process so you don’t burn more expensive fuels until you absolutely have to in ECA zones. But when you don’t have an accurate measurement of all fuels types, it’s difficult to make this process efficient and know you’re in compliance while keeping your costs down.

MARINE FUEL CONSUMPTION

Ensure compliance today and tomorrow

With Emerson's Micro Motion Coriolis flowmeters, you'll prepare your fleet to meet compliance requirements today and in the future. You'll be able to accurately measure fuel usage and prove your consumption with confidence. And with our global marine services, you'll always have access to support and guidance to fix problems quickly and maintain compliance.



By working with Emerson, you'll reduce human error from manual recalibrations and you'll be able to switch fuels as late as possible. By optimizing your process around fuel switching, you'll ensure you comply with emissions regulations as well as save money on costly alternative fuels.

PROVE YOUR CONSUMPTION

It's impossible to accurately measure emissions without measuring mass. With Emerson, you'll have the most accurate mass flowmeter on the market for CO₂ calculations. The CO₂ tax is coming, and with Emerson you'll be able to reduce your liability and prove consumption. And because your system checks itself, you'll have more reliable measurements to maintain and confidently prove compliance over time.

FUTURE-PROOF YOUR COMPLIANCE EFFORTS

With complex requirements and shifting deadlines, it's difficult to know how to comply with all regulations. You need to be focused on improving your business—not becoming an expert in regulations. Because your meters will work with all marine fuels from natural gas to high-temperature HFO, you'll be able to prove compliance no matter which way regulations go in the future, so the investment you make now will continue to pay off and ensure your compliance tomorrow.

OPTIMIZE DIFFERENT FUEL USAGE

ECA zones are expanding and that means you have to burn more expensive fuel, more often. Without a quick and easy way to measure consumption of different and costly fuel types, you end up spending more than you should. With Emerson, you'll be able to switch fuels quickly and safely, as late as possible before entering an ECA zone. That means you'll save on fuel costs as well as ensure you're always following emissions regulations.

MAKE ACCURACY EASY

Mechanical meters require you to reset your configurations with each fuel switch. This opens you up to human error resulting in inaccurate measurements, inefficient use of higher-cost fuels, and risk. With Emerson's direct, real-time density meters, you won't have to make any reconfigurations. With our highly accurate meters, you'll know the exact moment you switch fuel and if you're in compliance.

The cost of ships' fuel is expected to increase by 50% as a result of the increased use of low sulphur distillate fuel that will follow the implementation of the new IMO rules, MARPOL Annex VI, that will apply globally in Emission Control Areas by 2015.

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