



# SHIPPING

**Measurement  
Management & Treatment  
Performance Monitoring**



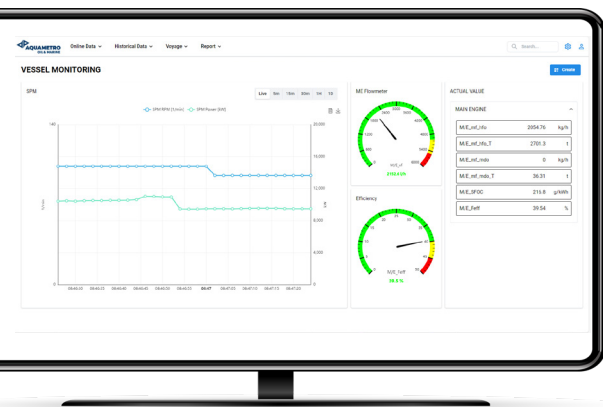
# Maximizing Efficiency and Cutting Emissions

**Accurate fuel consumption monitoring on vessels is essential for saving money and reducing emissions in the context of the EU Emissions Trading System (ETS). By closely monitoring fuel consumption, ship operators can identify areas where fuel efficiency can be improved, leading to cost savings and lower emissions.**

Since 1928, Aquametro Oil & Marine has been among the leading manufacturers and suppliers of measurement, optimization and monitoring solutions for all kinds of fluids on ships, vehicles and industrial applications. Our range consists of more than 100 different fuel oil meters and management systems which have been developed specially for ships, transport vehicles and other heavy machinery in the shipping and industrial sector. We are also considered experts in viscosity measurement and control as well as in measurement, monitoring and management systems for fuel performance. Our monitoring systems are modular and can be upgraded to generate and store reports, with the possibility of onboard/onshore analysis. Furthermore we offer fuel blending units that allow the blending-in of alternative fuels such as biofuels.

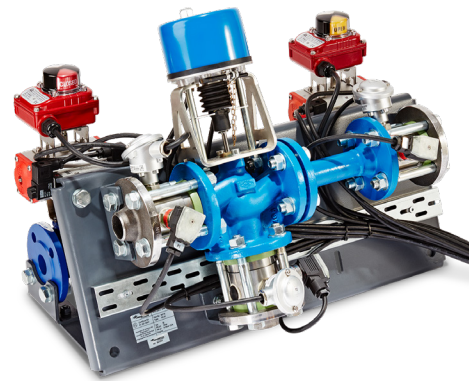






## MONITORING SYSTEMS

Our advanced onboard monitoring systems, RMS (Remote Monitoring System) and FPS (Fuel Performance System) can track fuel consumption and provide valuable data that can be analyzed to identify inefficiencies and optimize performance.



## HIGHLY ACCURATE FLOWMETERS

### Coriolis Meter AOM-CM

Gravimetric flow measurement in kg/h or t/h with highest accuracy for a flow range of a few kg/h up to 540 000 kg/h.



### CONTOIL type VFZII, VZO

Available in sizes from DN15 to 50. Accuracy as good as 0.1% for all highly accurate differential fuel flow measurements on ME/AE, boilers, generators and various combustion engines.



### DOMINO

Flow measurement for a large number of industrial liquids, including Methanol and all future upcoming alternative marine fuels, such as liquid ammonia.



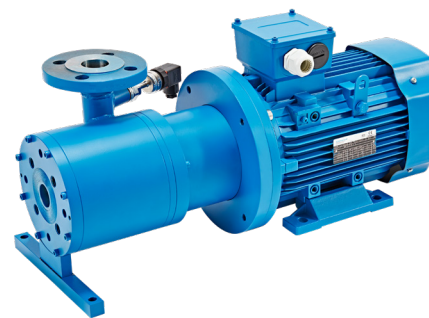
### CONTOIL type DFM, VZO, VZD, VZP

Available in sizes from DN4 to 12 for direct and/or differential measurement on all diesel fuel applications, diesel generators, small boats and burners.



## GREENBLEND

GreenBLEND is used for safe automatic fuel change-over processes or permanently controlled fuel blending of different types of fuels. When utilized to blend certified biofuel with fossil fuel, it enhances the CII-rating and cuts down on costs for EU-ETS allowances.



## HOMOGENIZER

Prevents sludge buildup, filter blockages, and deposits on engine components and turbochargers. Additionally, it enhances fuel stability during transitions between fossil fuels and biofuels, thereby improving combustion quality and reducing emissions.

## VISCOSITY CONTROL SYSTEM

Optimize combustion efficiency and fuel consumption with Aquametro's Viscosity Control System (VCS), consisting of a Viscomaster viscosity / temperature sensor, a VCS pipe adapter, a viscosity controller and a VCS motor control valve.



## SHAFT POWER METER SPM/ SHAPOLI DISPLAY

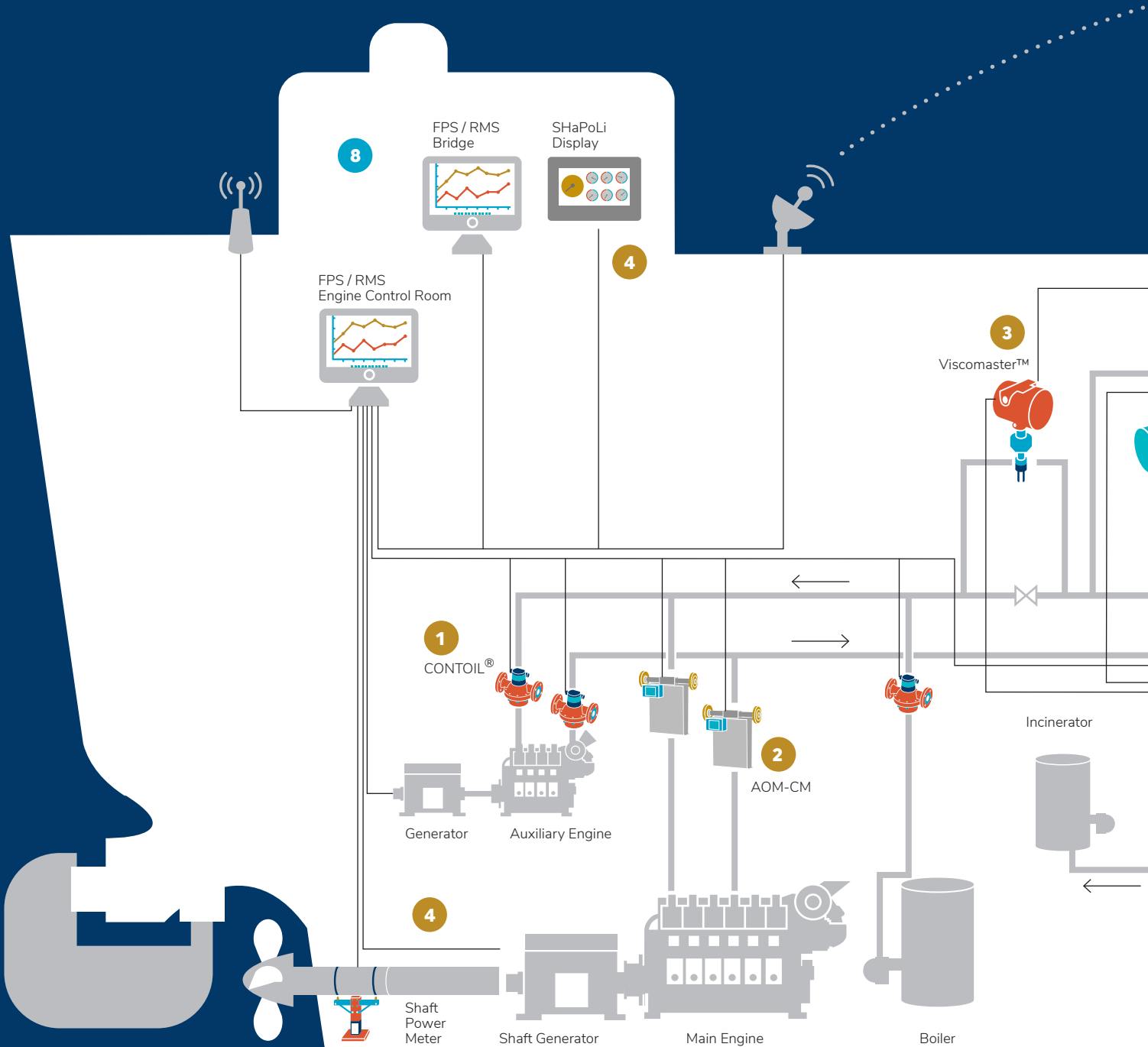
The Shaft Power Meter is the key component for measuring ship performance and fuel / propulsion efficiency. It is the cost-effective solution when reliable shaft power measurement and monitoring of shaft power limitation (SHaPoLi) is required.



# Aquametro solutions to measure, monitor

» Measure performance and fuel consumption on any type of vessel

» Our modular designed solutions ensure that you can easily combine and extend your applications with our subsystems



## MEASUREMENT

### 1 CONTOIL® Fuel oil meters

- » Precision flow meters
- » Integrated temperature sensor
- » Mass signal output

### 2 AOM-CM Coriolis Meter

- » Torsion oscillator design assures stable and drift free measurement
- » Resilient to external noise and vibration

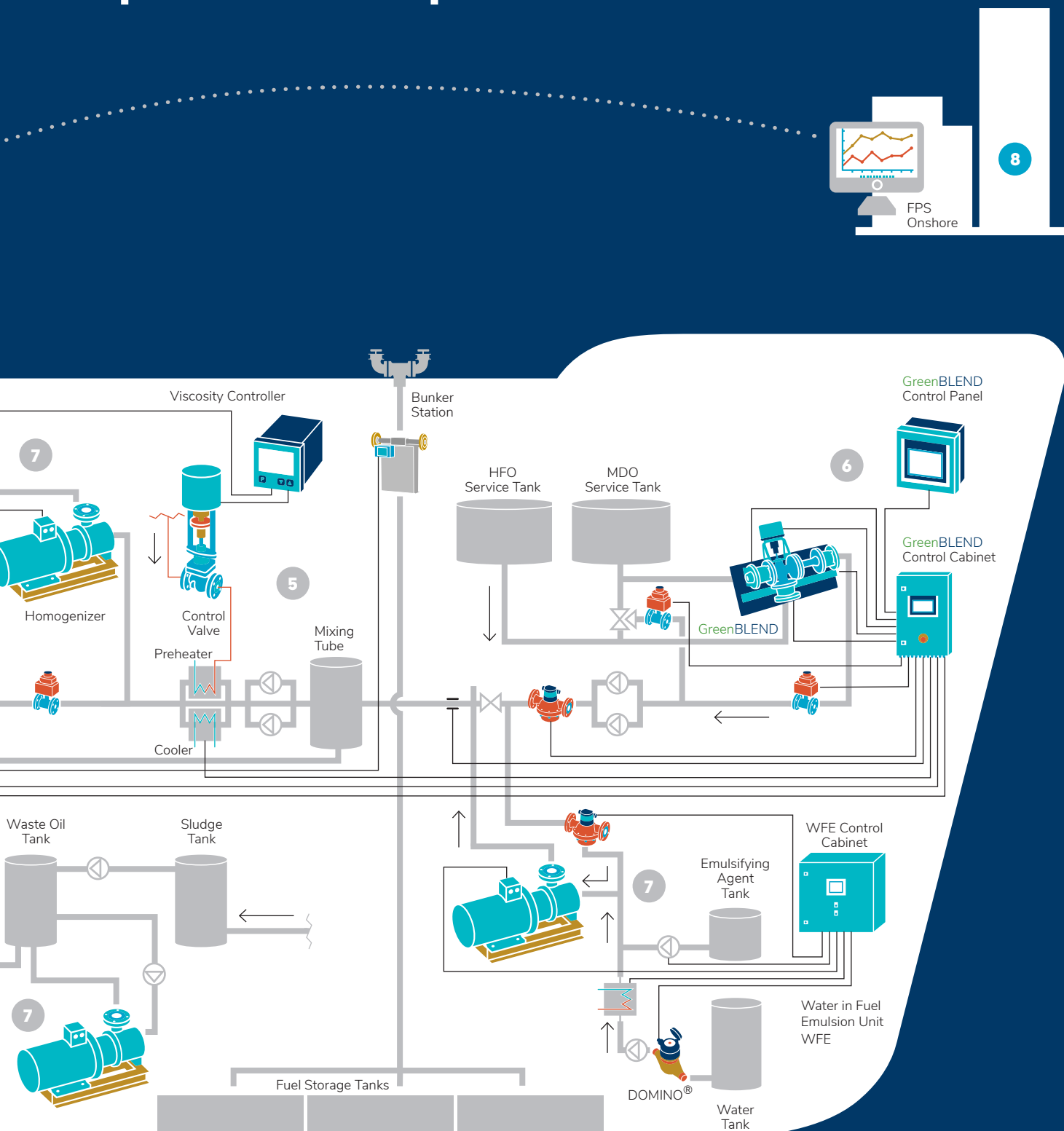
### 3 Viscomaster™ Sensor

- » Accurate viscosity measurement for perfect combustion
- » Minimum maintenance
- » Easy retrofit

### 4 Shaft Power Meter (SPM) & SHaPoLi

- » Torque measurement
- » Propulsion efficiency
- » SHaPoLi - shaft power limitation
- » DNV type approved

# and optimize vessel performance



## MANAGEMENT & TREATMENT

### 5 Viscosity Control System

- » Accurate viscosity control for perfect combustion
- » Minimum maintenance
- » Easy retrofit

### 6 GreenBLEND

- » Automated changeover and / or blending system
- » DNV type approved
- » Complete fuel management system

### 7 Homogenizer & WFE

- » Prevents sludge and filter clogging
- » Helps to reduce wear and tear
- » Reduces deposits in engine hot parts

## PERFORMANCE MONITORING

### 8 Fuel Performance System (FPS) / Remote Monitoring System (RMS)

- » Fuel efficiency
- » CO<sub>2</sub> emission reporting
- » Trends, analysis, reporting
- » KPI's free to configure



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