We make measurement easy!

ABB offers a wide portfolio of measurement products for key marine solutions – from fuel and combustion management as well as emission monitoring to ballast water treatment.





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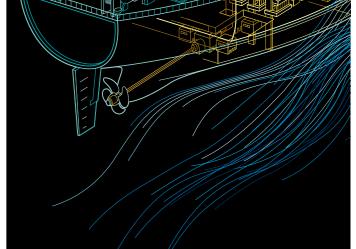
*14 euro cents/minute from German landlines, max. 42 euro cents/minute from mobile phone service

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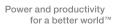
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Measurement solutions for vessel efficiency and fuel management Measurement made easy





Higher vessel efficiency and safety – compliance with statutory requirements Unique instrumentation and analytical solutions

Optimize consumption measurements with CoriolisMaster

This advanced series of DNV-GL certified flowmeters accurately measures mass flow and density in fuels, lubrication oil and gases. The flowmeters are virtually maintenance-free, robust and compact – making them ideal for marine and offshore applications such as bunker transfer monitoring.

- Different sizes for up to 860 t/h mass flow
- Various signal interfaces including WirelessHART
- Link to Cylmate, OCTOPUS, EMMA and Torductor
- Classification certificate

Fuel consumption monitoring with Torductor and CoriolisMaster

This unique contact-less shaft torque monitoring solution is used to measure the performance and tuning of the propulsion machinery. Combined with CoriolisMaster fuel flowmeters, it gives a comprehensive fuel monitoring solution.

- Shaft diameter 150-840 mm
- Classification certificates
- Unrivalled reliability and long-term repeatability
- Link to Cylmate, OCTOPUS and EMMA

Optimize engine performance with Cylmate

Cylmate is a comprehensive system for continuous engine performance measurement and monitoring of large 2-stroke diesel engines. Combined with ABB's CoriolisMaster fuel flowmeters, it provides comprehensive online SFOC monitoring solutions.

- Maintenance-free cylinder pressure sensors
- Integration for electronic controlled engine
- Optimize combustion efficiency
- Link to EMMA Fleet Control

Highly reliable engine temperature measurement

Reliable measurement of exhaust gas and cooling water temperatures is crucial for safety and availability of marine diesel engine plants.

- Maintenance-free instruments
- Wide range of sensor sizes for different applications
- Various signal interfaces including WirelessHART

Emission and combustion monitoring with Advance Optima

The Advance Optima gas analyzers deliver proven technology for monitoring the SOx/CO₂ ratio in exhaust gas cleaning systems on board. The solution is modular, enabling compliance without changing or restricting fuel, especially when combined with our combustion optimization solutions.

- Monitoring of SOx/CO₂ ratio, O₂, NO and NO₂
- No need for fuel switching or engine re-certification
- Optimize combustion efficiency
- Compliant with IMO regulations and ECA restrictions
- Link to EMMA Fleet Control

Ballast water monitoring and control with ProcessMaster

ProcessMaster electromagnetic flowmeter is a certified flow measurement solution that delivers superior accuracy and easy installation in a maintenance-free device that has no moving parts. Designed for conductive fluids and larger diameter pipes, it is ideal for ballast water treatment systems.

- No pressure drop through the meter
- Wide range of sensor sizes: DN 3...2000 (1/10"...80")
- Various signal interfaces including wireless
- Certificates including CE, PED, DNV-GL

ProcessMaster | Advance Optima



Coriolis | Torductor



Cylmate | Temperature sensor



Seamless integration with ship performance advisory systems

ABB's Energy Efficiency and Advisory System is a unique product portfolio for performance management in marine operations. It reduces fuel consumption and emissions while increasing availability and safety on a single vessel or on a whole fleet of vessels.

The product portfolio includes **EMMA Advisory Suite**, comprising energy-related monitoring and optimization tools.

It further includes **OCTOPUS Advisory Suite**, providing vessel motion based monitoring, calculation and forecasting tools that increase the vessel availability and safety.

Combined with **CoriolisMaster** fuel flowmeters, **Torductor** torque meter and **Advance Optima** gas analyzers, both Advisory Suites offer comprehensive fuel management monitoring solutions.

The **EMMA Advisory Suite Fleet Control** web application allows as cloud based database a fleet-wide energy monitoring.

EMMA | OCTOPUS

