

ABB MEASUREMENT & ANALYTICS | APPLICATION NOTE

ABB Measurement & Analytics

Trusted solutions for ballast water treatment applications



The perfect fit for ballast water treatment systems

Measurement made easy

Ballast water treatment in the marine industry

Introduction

Changing regulations in the marine industry have driven the need for ballast water treatment and measurement.

Ballast water is used to stabilize vessels when not fully loaded. Water that is taken in at one port and released at another port causes the introduction of non-indigenous organisms into fragile ecosystems.

Untreated ballast water is now highly regulated and all vessels must install a ballast water treatment system.

ABB's perfect fit

Traditional mechanical flowmeters are negatively affected by ballast water due to the presence of mussels, sand and other particles. This limits the lifespan of the meter and results in increased maintenance and replacement cost.

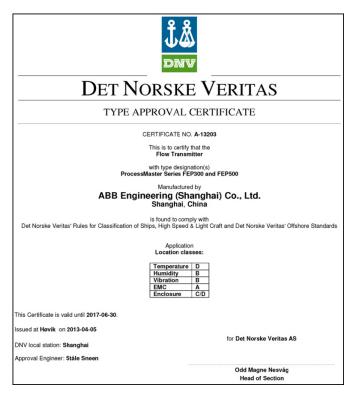
ABB's ProcessMaster electromagnetic flowmeter has no rotating parts reaching into the pipe that can wear and cause pressure loss. A highly abrasion-resistant sensor liner material makes ProcessMaster ideal for this application.

Trust a world leader in flow measurement

ABB has been manufacturing flowmeters for over 80 years and is responsible for many of the great innovations in flow measurement technology.

Our flowmeters have a reputation for quality, reliability and accuracy. Plus, they are all backed by a global network of service engineers that are available where and when you need them.

The ABB ProcessMaster series of electromagnetic flowmeters has now been awarded DNV certification for marine applications. Delivering you performance and peace-of-mind in a single package.



Key features of ProcessMaster

- High measurement accuracy 0.2 % of rate
- Easy to understand, simple to operate through intuitive navigation and configuration.
- Backlit, high-contrast and configurable display for installations in areas such as the machine room.
- Detailed diagnostics for rapid decision making, providing the right information to keep the process up and running.
- Simplified trouble shooting increases productivity and process safety. Fault finding help text is shown in the display.
- ScanMaster tool allows performance of in-situ verification of the flowmeter.
- Empty pipe detection in-built diagnostic.
- · Integral or remote electronics.
- Sensor sizes: DN3 to 2000 (½10 to 80 in)



ProcessMaster

Certificate

ABB provides many other devices suitable for ballast water treatment

Valve control using an ABB positioner

Our ever-expanding family of products includes a complete line of actuators, positioners, damper drives, and converters with a variety of features and functions.

Whether electric or pneumatic, intelligent or conventional, part-turn or linear movement – ABB is your supplier of choice for easy to integrate, operate and maintain valve control.



TZIDC positioner

Key features of ABB's TZIDC positioner

- Best in class shock and continuous vibration immunity at 10 g
- Easy to operate through single button startup and Autotune
- Adaptive tube function for realtime self-optimization
- · No overshooting when regulating
- Lowest air consumption on the market
- Easy to maintain through position deviation indication

Pressure transmitters and sensors

ABB's 2600T family of pressure transmitters and sensors are available in a wide variety of configurations. Our all-stainless steel versions are field-proven in off-shore applications and feature unique features such as finger-tip through the glass operation, built-in back-up configuration storage, easy to change electronics modules and plugged impulse line detection.





2600T pressure transmitters

Key features of ABB's type 266 pressure transmitter

- Marine approved
- · High accuracy
- 10 years stability
- Possible to change the electronic and main board during operations
- Enhanced diagnostic features such as plugged impulse line
- Easy to operate through Quick Setup menu guiding the operator

More information





ABB Measurement & Analytics

For your local ABB contact, visit: www.abb.com/contacts

For more product information, visit: www.abb.com/measurement



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