

Complete tank expertise

Marine tank management solutions for all ship types



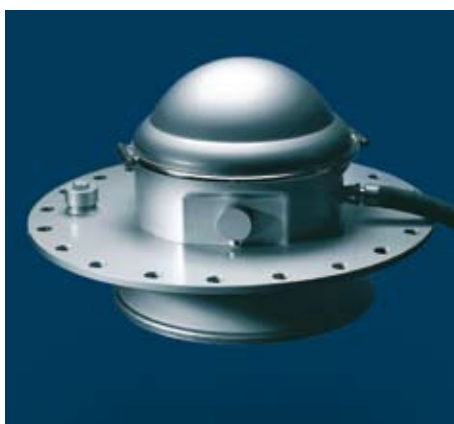


understanding of the conditions of the marine market. You'll find we're unique in our in-depth understanding of the details of the individual processes and our development of technologies to meet your challenges.

3 times the leadership

The name Emerson Process Management might sound unfamiliar at first. But chances are you've actually known us for years. We represent the merged resources of Rosemount Tank Radar AB, Damcos A/S and SF-Control OY — each a leader in its field of expertise. And we're all committed to helping you maximize your opportunities in tank management.

Rosemount TankRadar pioneered marine tank gauging and has remained the indisputable knowledge leader of the industry for more than 30 years.



LevelDatic is an electro-pneumatic system for the measurement of levels and filling rates in all types of tanks. We have 3000 installed systems today.

MAS2600 is based on pressure technology for reliable and high-quality tank level and draft measurement. It can be mounted both from the tank's top and side.





See your opportunities unfold



Damcos' leading Valve Remote Control systems feature compact, space-saving actuators for high-torque output.

Any tank-related function. Any vessel. Any challenge. Emerson Process Management offers a wide variety of marine tank management solutions that broaden your opportunities for success—including more uptime, higher productivity and safer, more reliable conditions.

From systems integration down to single components, Emerson is your source for world-leading application knowledge, best-in-class products, an all-tanks system approach and consistent, expert support from start to finish.

No other company in the world offers our particular combination of superior tank-related products and expert know-how. It's a combination that comes out of decades in the business. And every day, thousands of customers around the world depend on it.

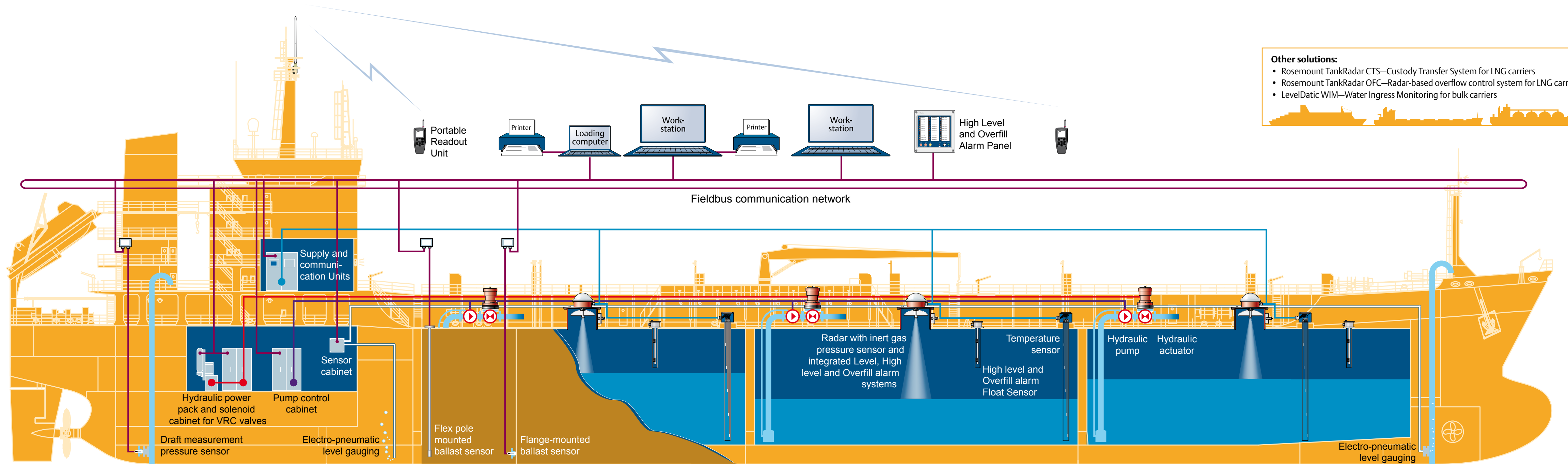
Widespread solutions; in-depth competence

Emerson solutions are based on pioneering technology, unrivalled application expertise and a thorough

Marine Tank Management (MTM) System

The MTM system is a complete, integrated solution for the monitoring and control of all tank-related functions on any type of ship. Because we build the system from the bottom up, integrating sub-systems and products developed, designed and manufactured by our own marine companies, you are ensured a solution that meets your specific requirements.

- Visibility of all tank-related functionality with user-friendly interface covering the whole system and all tank-related functions
- Reduced engineering work due to integration of all tank-related sub-systems/functions
- Developed, designed and tested according to your specifications and requirements
- Quick and easy installation and commissioning
- One-stop-shop efficiency with worldwide support in all phases
- Monitoring and control of yard-supplied sub-systems also possible



Other solutions:

- Rosemount TankRadar CTS—Custody Transfer System for LNG carriers
- Rosemount TankRadar OFC—Radar-based overflow control system for LNG carriers
- LevelDatic WIM—Water Ingress Monitoring for bulk carriers

Damcos®

Actuators and valve remote control systems

With more than 30 years of experience and innovation behind them, Damcos VRC systems deliver safety and reliability in a compact, cost-effective design. You benefit from the VRC's stability, flexibility and reliability, as well as long operating life and low maintenance. Damcos VRCs meet industry standards and authorities' requirements worldwide.

- Hydraulic VRC—Compact, yet high-torque output
 - weight and space saving
 - prepared for direct built-on modular control function
 - patented multi-helical spline

- easy adaptation and mounting on all quarter-turn and linear valves; adjustments without demounting - minimum oil volume and pipe dimension
- built-on portable hand pump
- hydraulic and electric position indicators
- customized Control Units and System Power Unit
- Electro-hydraulic VRC—Designed to be mounted directly on Damcos valve actuator
 - power or P-NET bus controlled
 - automatic functions and supervision
 - no piping needed
 - no System Power Unit or Solenoid Valve Cabinet needed

ROSEMOUNT® Marine

Radar tank gauging systems

Rosemount TankRadar STaR is a tank gauging, alarm handling and cargo control system designed to meet industry requirements for any ship and cargo. An integrated solution for level, high-level and overfill alarm functions, it provides accurate gauging and reliable operation with low maintenance.

- No moving parts in tank—reduces maintenance cost
- Service and cleaning in closed tank—inspection hatch for easy access

- Service and communication display—onboard analysis, tank data monitoring and self-testing
- Fits all tanks—wide range of antennas, including Parabolic (Bitumen and high-temperature cargo), Cone (shallow tanks, limited deck space) and Still-Pipe (very narrow tanks, draft measuring)
- Independent measuring channels for level, high-level and overfill alarm—galvanically separated
- Electronics exchangeable without taking ship out of operation

LevelDatic™

Electro-pneumatic tank level gauging

LevelDatic electro-pneumatic system is a reliable solution for ballast, fuel, miscellaneous tanks and void spaces providing accurate tank level indication for all ship types.

- Reliable, high-quality level and draft measurement
- No electrical parts inside tank
- Virtually no maintenance cost - service in safe area
- Low consumption of power and supply air
- All parts interchangeable between tanks, reducing need for spare parts

MAS2600

Electronic tank level gauging

The MAS2600 pressure sensor is designed for level and draft measurement. The MAS2600 provides genuine versatility with approved mounting designs, from both the tank's top and side. The sensor is robust and durable, with low maintenance requirements.

- Reliable, high-quality tank level measurement
- One sensor for all types of liquid—reduces number of spare parts
- Fully welded sensor with capacity to handle pressure spikes
- Titanium sensor—seawater resistant; minimizes sensors needed in spare part set

Expertise within Marine Tank Management

Emerson Process Management (emersonprocess.com), an Emerson business, is a leader in helping businesses automate their production, processing and distribution in the chemical, oil and gas, refining, power, water and wastewater treatment, metals and mining, pulp and paper, food and beverage, pharmaceutical and other industries.

Emerson's Marine Tank Management division is part of Emerson Process Management. Our expertise covers integrated tank management systems, valve remote control, cargo tank gauging, ballast, fuel oil and service tank monitoring and draft measurement for all types of ships and offshore units.

Our brands – Damcos, LevelDatic, MAS2600, Rosemount TankRadar – have served marine customers for more than 30 years and together represent the foremost thinking within marine tank management. What really sets us apart is our dedication to the marine sector and engineering excellence. This is reflected in all aspects of our offering, from design and production, through to application know-how and global after-sales support.

For contact information, addresses and facts about our global sales and service network, please visit:

www.emersonprocess.com/mtm

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