



 **ABC**

ALWAYS BE CALIBRATED

**Your On-Board Gas Detection
and Calibration Solution**

You're Spending Too Much On Gas Detection

You use far more calibration gas than you need, while on-shore calibration certification takes unnecessary time.

The administration costs, time, and legislative headaches caused by compliance put great pressure on your already-stretched budgets.

Not anymore. The A-B-C™ 'Always Be Calibrated' system does exactly that: ensures your total compliance, saves you money, and delivers the longest reactive mixture shelf-life of reactive gases available in the world.

Why invest in the A-B-C™ system on your vessels?

- You will ensure **full compliance with all current and planned legislation** and surpass performance standards.
- You will perform **failsafe, accurate, repeatable and certified on-board calibration and bump testing of your quad gas detector**. Simply place the detectors in the A-B-C™ station and it does the rest – with calibration and certification in less than a minute.
- The A-B-C™ system will automatically generate tamper-proof serial number specific calibration certificates, **completely free from human intervention and error**. These tamper-proof certificates are accepted by all port facilities, oil majors and flag states.



Your Regulatory Requirements

Maintaining crew safety and confidence when dealing with hazardous gases in confined spaces can be difficult - not to mention a regulatory nightmare.

Martek Marine were consulted as an industry authority during the drafting phase of this new legislation which is designed to drastically reduce the number of unnecessary deaths on ships.

The IMO Regulation XI-1/7 - Atmosphere testing instrument for enclosed spaces

“Every ship to which chapter it applies shall carry an appropriate portable atmosphere testing instrument or instruments.

As a minimum, these shall be capable of measuring concentrations of oxygen, flammable gases or vapours, hydrogen sulphide and carbon monoxide prior to entry into enclosed spaces.

Instruments carried under other requirements may satisfy this regulation.

Suitable means shall be provided for the calibration of all such instruments.”



Your Regulatory Requirements

ExxonMobil MESQA 2010 Requirements

E.13: A vessel carrying H₂S cargo MUST have on-board dedicated and certified personal devices for monitoring H₂S, sufficient for at least every crew member working on exposed deck/area.

E.14: All vessels MUST carry the following portable gas detection equipment:

- Two Explosimeters (at a minimum)
- Two Oxygen Analysers (at a minimum)
- Toxic Gas Detectors or Analysers suitable for the range of products being carried.
- On vessels operating with IGS, two instruments capable of measuring hydrocarbon content in an oxygen deficient atmosphere MUST be provided (at a minimum).

It is strongly preferred that personal multiple gas detecting alarm units are used by each person working in a potentially hazardous area.

E.15: Toxic gas detectors for measuring H₂S MUST be certified specifically for use in air or an inert gas atmosphere.

E.16: All vessels MUST have on-board records of tests to show that all gas detection equipment (fixed and portable) is routinely maintained and calibrated.

E.17: Appropriate span/calibration gas, maintenance kits & batteries MUST be carried to enable the equipment performance to be checked & kept in a fully operational condition.



Your Current Calibration Problems

- High costs for calibrating each instrument
- Complicated logistics of sending detectors on-shore for calibration
- The need to buy additional detectors to cover when they are away for calibration
- High supplier costs of return carriage to ship
- Calibration gas delivery problems to specific ports
- Additional charges for replacement sensors and parts without your control
- Excessive use of calibration gas for on-board bump tests
- Short term expiry dates on calibration gas – wasted gas
- Loss of protection whilst detectors are away from your ship for calibration
- High administration costs of the whole process
- Loss of control of costs – hidden costs
- Un-duly high reliance on a suppliers logistics and service delivery



The Benefits of On-board Calibration

- The peace of mind that your crew is never without a working gas detector
- Produce tamper-proof calibration certificates - full traceability
- No need for additional detectors to cover shore side testing
- Guaranteed compliance – accepted by all port facilities, flag states and oil majors
- Save 85% on manual calibration gas use
- Auto calibration and testing in less than a minute - 100% safety assurance
- Fail-safe system – 100% safety assurance and peace of mind
- 5 simple steps to calibrate - any crew member can easily use the ABCTM system
- Historical calibration data can be printed when needed to please authorities
- Enhance safety with regular repeatable calibration standards
- Eliminate purchasing overheads and create free time



USE **85% LESS** GAS

SAVE \$200+
FOR EVERY
CALIBRATION
ON-BOARD



Your A-B-C™ ‘Always Be Calibrated’ Solution

A-B-C™ Self Calibration Station

- ‘Bump’ tests detectors in 30 seconds
- Fail-safe system
- Tamper-proof calibration certificate accepted by Class, Port Control & Oil Majors
- You’ll use over 85% less calibration gas testing and calibrating your gas detectors



The A-B-C™ Self-Certification/Calibration Station provides you with fail-safe automatic “bump” testing and calibration of your Marine4™ portable gas detectors. Simply place your Marine4™ gas detector in the station, close the door, and the detector is tested and certified in less than a minute.

Test to laboratory standards every time on-board with the unique design of the ABC™ station. The simplest on-board calibration and certification station, you can deliver tests whenever, wherever and always be compliant.

With every use, you will save 85% of gas usage compared to your on-shore calibration systems - which means hundreds of dollars back in your pocket. Every. Single. Time.

Marine4™ Quad Gas Detector

- MED wheelmarked certified for use on all vessels
- Integral sampling pump as standard
- Tough and impact-resistant design to last on ships
- Meets ALL new IMO legislation



The Marine4™ Gas Detector is very simple and is operated with only one button. The Marine4™ simultaneously detects and displays up to 4 different gases and provides audible and visual alarms in the event of exposure to dangerous gases. **The Marine4™ can easily be calibrated on-board with the A-B-C™ system to ensure you and your crew are always protected.**

The A-B-C™ system delivers on-board automatic and fail-safe calibration and bump testing of your detectors during re-charging. The equipment automatically generates tamper-proof serial number specific calibration certificates, completely free from human intervention and error. Simply put the detectors in the A-B-C™ station and it does the rest.

In addition, the A-B-C™ solution provides you and your crews with unique training videos which give simple, step-by-step instructions on the set up, use, and calibration of the equipment.

Your A-B-C™ 'Always be Calibrated' Solution

Marine5™ Quad Gas Detector

- 15 different 'plug and play' sensors available
- MED wheelmarked certified for use on all vessels
- Integral sampling pump as standard
- Tough and impact-resistant design to last on ships
- Meets ALL new IMO legislation

The Marine5™ Gas Detector is very simple and is operated with only one button. The Marine5™ simultaneously detects and displays up to five different gases and provides audible and visual alarms in the event of exposure to dangerous gases.

The Marine5™ can easily be calibrated on-board with the A-B-C™ system to ensure you and your crew are always protected.



Single Gas Detector

- MED wheel marked for use on ALL vessels
- Robust and accurate portable gas detector
- Detects and displays either O2, H2S or CO
- No calibration required

Martek Marine's Single Gas Detector is an easy to use, zero maintenance gas detection solution. Like all Martek Marine products, **this single gas detector is incredibly reliable and therefore gives you the confidence to focus on the task at hand.**

You turn it on for the first time and the detector does the rest, there is no need to set up or program the monitor. Once activated the detector does not require charging or calibration so these detectors can be deployed 24 hours a day for two whole years without having to worry about calibration or maintenance. The H2S and CO models also include a hibernate feature which allows you to extend the battery life by up to one year.



Marine Tankscape™ - In Tank / Hold Gas Monitoring

- MED wheel marked for use on ALL vessels
- Up to 5 gases can be simultaneously measured
- On-board calibration with tamper proof certificate printing on-board
- Infra-red sensors for low oxygen tanks / spaces
- Tough / robust - built to last on ships

Marine Tankscape™ is the ultimate in rugged marine design to last the years in a hostile environment. You will find it easy to use during cargo operations and during tank / hold inspections - an important factor to save you time (and therefore, as always, money!).

Reliable, simple, and always ready to use: your Tankscape™ won't let you down.



Customer Testimonials

What Our Customers Say:

“The logistics of on-shore calibration and record keeping meant high cost and inconvenience. Authorities want a document showing calibration done...the equipment bought from Martek can do calibration and print certificates.”

Mohammad Hoque, PIL UK Ltd

“We had difficulties arranging calibration at remote ports, and with span gas testing because of the various different make detectors on-board – not to mention the cost of these services. The A-B-C™ solution resolved all of our difficulties and offered huge savings.”

Murali Kodi, Campbell Shipping

“Being able to calibrate our own detectors on-board rather than sending them ashore has saved us thousands of dollars, many man hours and removed a logistical and administrative headache.”

John Samonas, John Samonas & Sons

“Positive feedback from vetting inspectors is that calibrations can be demonstrated immediately onboard with an audit trail of certificates. The ability to test to consistent standards without human error provides higher levels of safety assurance, too.”

Hakan Hassleberg, Wisby Ship Management AB.



Customer Testimonials

What Our Customers Say:

“We changed our on-board gas detection to the ABC solution from Martek Marine because it delivered the maximum levels of safety, ensuring gas detectors are always tested and calibrated on-board, whilst reducing the significant burden of miscellaneous costs such as administration, logistics and calibration.”

Michael Powell, Graig Ship Management Ltd

“BBG decided to work with Martek Marine for the ABC Gas Detector equipment for a number of reasons. Firstly, we were impressed with the cost savings that could be achieved through simple on board calibration. Secondly, being able to calibrate, bump test and replace sensors on board saves us a lot of administration time in sending equipment back to shore, the ABC system eliminates the need to send any equipment to shore. Finally, the simplicity of the system gives us confidence that the crew can very easily calibrate the units on board with zero problems. ”

Martin Seidel, Bremer, Bereederungsgesellschaft GmbH &Co. KG

“We bought the A-B-C™ complete portable gas detector solution from Martek Marine because they provided us with a combination of a great product with great service. The ability to calibrate our portable gas detectors on-board gives us a cost effective system that frees us from the burden of onshore testing.”

Piyush Kumar, Technical Superintendent - Aegis Business Limited



Slash your operating costs with

A-B-C™

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