



INTRODUCING PORTASCANNER® WATERTIGHT PLUS

Ultrasonic Watertight Integrity Indicator designed for watertight structures and hatch covers



INTRODUCING THE PORTASCANNER® WATERTIGHT PLUS



Introducing the **Portascanner® WATERTIGHT PLUS** - the upgraded version of the world-leading, fully **ABS Type-Approved** and **RINA-Accepted** **Portascanner® Watertight**.

What is it? It's a watertight integrity tester designed to inspect hatch covers, watertight doors, and MCTs.

What is it for? It's used to inspect watertight and weathertight seals on ships, warships, marine structures, and offshore oil & gas platforms.

The **Portascanner® WATERTIGHT PLUS** offers significant enhancements to functionality and display, all packaged into a smart, ergonomic, and rugged enclosure.

What are the main features? The implementation of three testing modes, including Open-Hatch mode specific for hatch covers, gives the user greater control when testing a wide variety of hatches and watertight structures.

- **Type** – Ultrasonic Watertight Integrity Indicator
- **Part Number** – 509004-WTPLUS
- **IMPA P/N** – 652778
- **NSN** – 6625-99-257-8336

Function: To test the integrity of sealed compartments such as watertight/weathertight doors, hatch covers, and multiple cable transit areas, with three intelligent operational modes and the ability to detect leaksites as small as 0.06mm.



WIDE ARRAY OF APPLICATIONS



SHIPPING/MARINE



DEFENCE/NAVAL



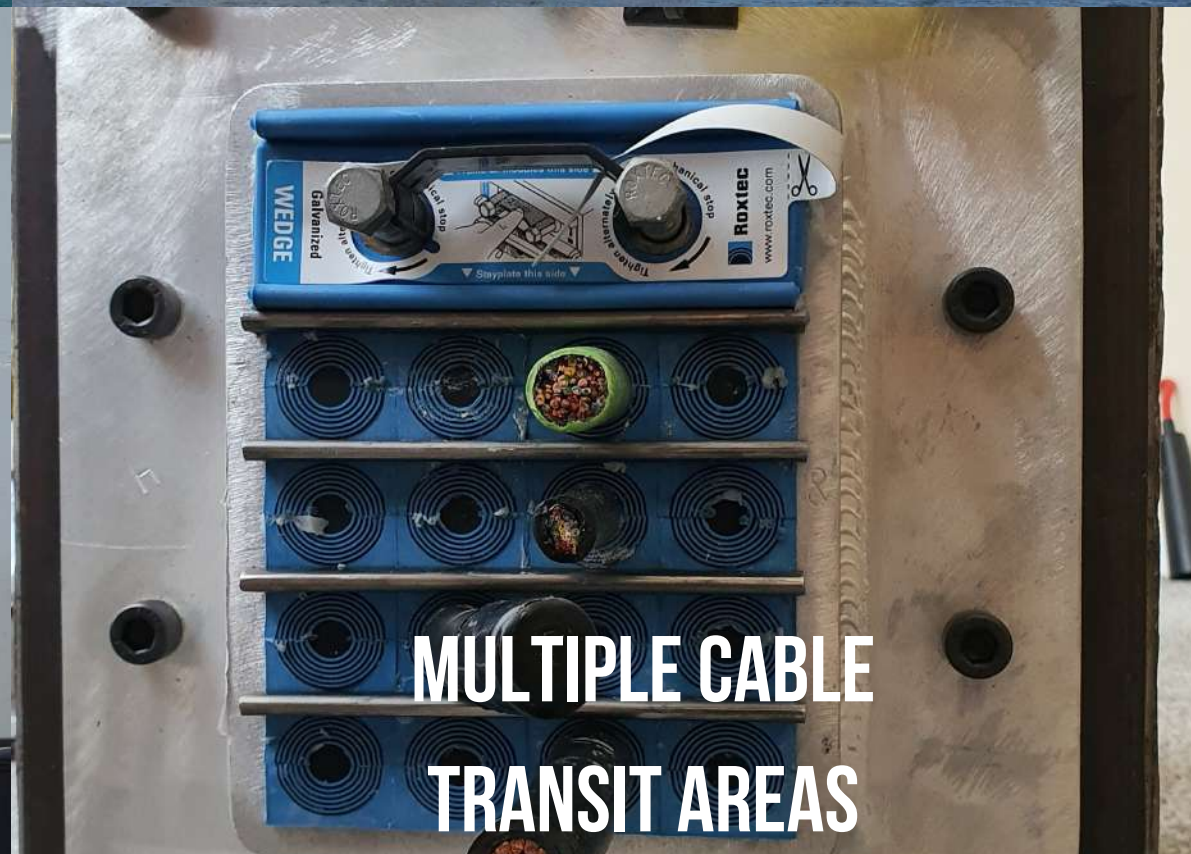
OIL & GAS



HATCH-COVERS



**WATERTIGHT/
WEATHERTIGHT DOORS**



**MULTIPLE CABLE
TRANSIT AREAS**

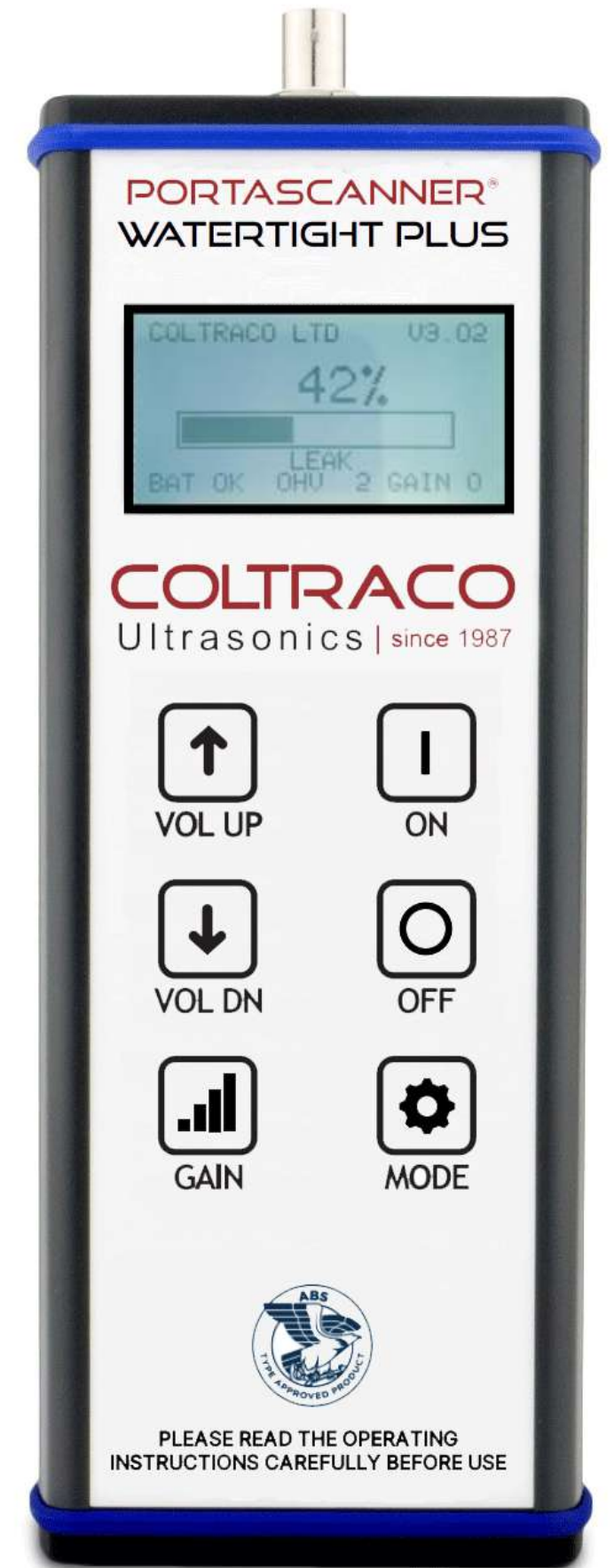
ENHANCED INTERFACE AND INTELLIGENT OPERATIONAL MODES



The **Portascanner® WATERTIGHT PLUS** provides three intelligent operational modes, offering users greater control when testing a wide range of hatches and watertight structures.

With the implementation of these testing modes, users can now switch between **Linear**, **Decibel (dB)**, and an **Open-Hatch** mode (specific for hatch covers) that displays the percentage of leaks, thanks to a new user-friendly interface upgrade.

The illustration below shows the new interface on Open-Hatch mode:



Revolutionise your watertight and weathertightness assessments with our powerful, portable **Portascanner® WATERTIGHT PLUS** - the ultimate tool for pinpointing leaks and ensuring safety and watertight integrity.



ENSURE INTEGRITY WITH THE PORTASCANNER® WATERTIGHT PLUS

The **Portascanner® WATERTIGHT PLUS** is an essential for marine industry professionals who need to ensure the integrity of watertight and weathertight seals on ships and marine structures.

Key benefits include:

- **Accurate** and versatile instrument capable of detecting holes as small as 0.06 mm
- **User-friendly** display with three intelligent operational display modes: Linear, Decibel (dB), and Open-Hatch mode
- **Versatile** range of power settings catering to small, medium, and large cargo holds
- **Flexible** variable gain multi directional 5-transducer generator for optimized testing and greater flexibility for working on different-sized structures
- **Optimized** flexible sensor wand for testing in tight, challenging areas such as MCTs
- **Time-saving** feature whereby the generator can be placed on the hatch coaming
- **Suitable** for use by any operator, with training and free lifetime technical support provided



CUSTOMER TESTIMONIAL

“The fleet was equipped with a unit per Bulk Carrier and the units are working well, providing the confidence that there will be no problems with water damage claims.”



ADVANTAGES OF THE PORTASCANNER® WATERTIGHT PLUS

Practical

Portable, lightweight, hand-held instrument

Accurate

Unbeatable accuracy of detecting leaks as small as 0.06mm

Water Resistant

Features an IP65 enclosure for the main unit

Versatile Modes

Three intelligent operational modes and additional power settings for greater control



Test

MCT's, Watertight Compartment Doors, Hatch Covers, Compartmentation

Flexible Testing

Multi-directional 5-transducer variable gain generator and flexible sensor wand for testing of various structures in tight spaces.

Risk Detection

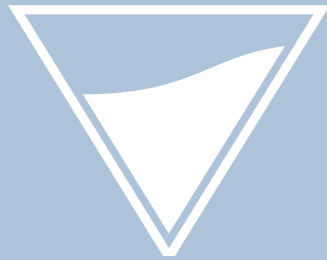
Early Risk Detection with Complete Pre- and In-Transit Assessment of Compartments or Vessels

Ease of Use

Designed for pre and post-loading tests. Can be used by the crew.

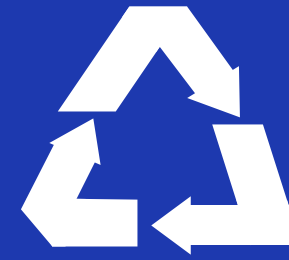


ADVANTAGES VS. OTHER WATERTIGHT TESTING METHODS



PRECISE

Detect leaks as small as 0.06mm with readings in Linear, Decibel (dB) and Open-Hatch mode



GREEN Technology

A clean method of testing that does not violate any environmental codes, unlike hose testing



REDUCE RISK

Non-invasive & non-intrusive technology. Pinpoint the exact leak locations and their extent in order to perform corrective actions to reduce risk of water ingress



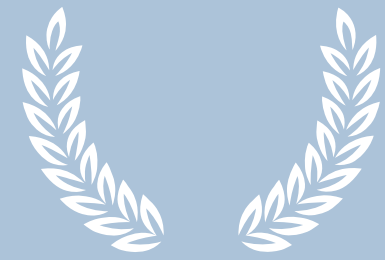
COMPLIANT

Readings provided in dB for regulation compliance or mathematical linear and percentage for ease of use



APPROVALS

Full ABS Type Approval & RINA Class Accepted



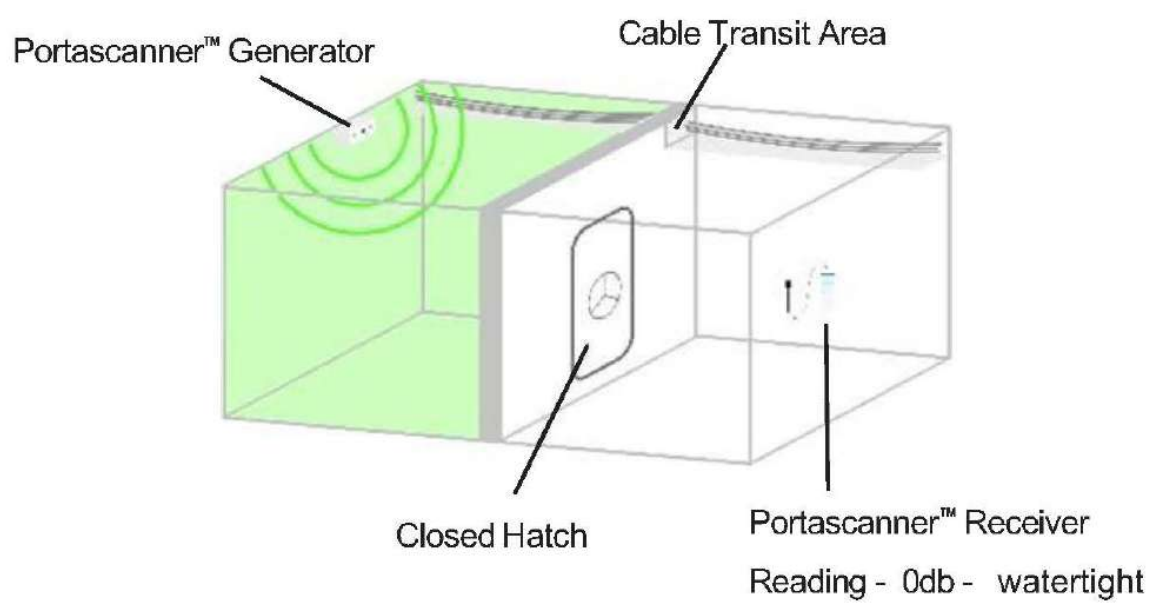
AWARD FINALIST

IHS Markit Safety Product of the Year nominated.

HOW TO TEST: 3 SIMPLE STEPS

The **Portascanner® WATERTIGHT PLUS** works by using ultrasonic technology to test the integrity of sealed compartments, watertight/weathertight doors, hatch-covers, and multiple cable transit areas.

Figure 1. Watertight Compartment



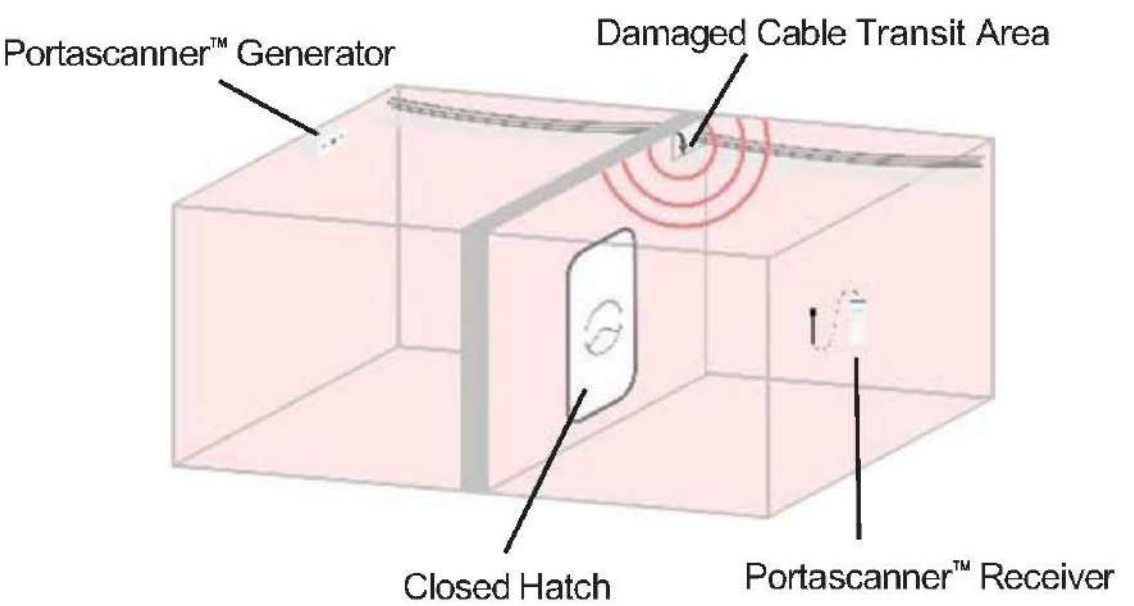
1. **Connect** the rod and headphones to the receiver, switch the generator "on", and place it into the compartment to be tested. Obtain the Open Hatch Value (OHV) for the hatch cover.
2. **Close** the compartment, point the sensor to the area of interest.
3. **Move** the sensor around the seal. The strongest signal indicates the leak site.

RESULTS

OPTION 1: decibel (dB)	OPTION 2: Linear/ numerical	OPTION 3: OHV %
Up to 33 dB = watertight seal	0 - 5 = watertight seal	WATERTIGHT
33 dB - 57 dB = weathertight seal	6 - 100 = weathertight seal	WEATHERTIGHT
58+ dB = weak seal compression	101+ = weak seal compression	LEAK
high values = full leak site	For hatch cover: above 10% OHV = leak site. high values = full leak site	Percentage leak value also displayed.

*In Open-Hatch mode (specific for testing hatch covers), the percentage leak value is displayed throughout all three display modes

Figure 2. Non-compliant Compartment



STAY COMPLIANT WITH REGULATIONS



DELIVER BETTER WATERTIGHT INTEGRITY ONBOARD

SOLAS Reg II-1/11.1

"Where a hose test is not practicable [sic] it may be replaced by [sic] an ultrasonic leak test or an equivalent test. In any case a thorough inspection of the watertight bulkheads shall be carried out."

IMO SOLAS Reg II-1/21.3

"The watertight doors and all mechanisms and indicators connected therewith[sic] shall be periodically inspected at sea at least once a week."

IMO SOLAS Reg II-1/13-1.1

"Where penetrations of watertight bulkheads and internal decks are necessary for access, piping, ventilation, electrical cables, etc., arrangements are to be made to maintain the watertight integrity."


IACS Rules - Requirements for Ultrasonic Watertight Integrity Service Providers

"2. Firms engaged in tightness testing of closing appliances such as hatches, doors etc. with ultrasonic equipment."





ABOUT COLTRACO ULTRASONICS

 **Led by our Chairman**, Dr Carl Hunter OBE, founder of Coltraco Ultrasonics.

Headquartered in **London**, we are a British high-exporting advanced manufacturer.

Operating in **120 countries**, with Distributors in **80 countries**.

Our technologies are used across a diverse array of **25 Market Sectors**, from shipping to safety engineering, from process control to mining, from offshore energy to renewables, from healthcare to the built environment, naval and space.

Proud winners of the Queen's Award for Enterprise in International Trade, in both 2019 and 2022.

 Our organisation comprises of Manufacturing, Scientific, Research and Technological Development & Solutions:

- Our **Company**: COLTRACO ULTRASONICS
- Our **Laboratory**, co-located with the Centre for Advanced Instrumentation, part of the Department of Physics, Durham University
- Our **Research Organisations**, the Durham Institute of Research, Development & Invention (DIRDI)
- Our **Centre for Underwater Acoustic Analysis** (CUAA)

"To see the sounds that others cannot hear"

"To measure the hitherto unmeasurable"



Delivering **Safesite™** on land in areas such as the airtightness of a building, data centre or ICU Hospital Ward and

Safeship™ at sea in the watertight integrity of a ship or offshore platform or the monitoring of the gaseous extinguishing system contents that protect them against fire.

BY BEING SCIENCE-LED:



We identify and nurture brilliant minds, creating a unique research environment at Durham University, a globally outstanding centre of teaching and research excellence.



In our research at DIRDI, we undertake fundamental research into the physical laws of the universe, alongside applied research in Physics, Mathematics, Engineering and Computer Science in acoustics, electromagnetism and information engineering.



It is our research and manufacturing excellence and our enduring commitment to the "through-life" sustainment of our technologies by aerospace standards of Maintenance, Repair, Overhaul, Calibration & Certification.



We deliver genuine value for our customers through our scientific and institutional values, and the global quality of our instrumentation, commercial and technical services.

OUR CUSTOMER CARE COMMITMENT



Russell Fraser Sales Pty Ltd

Unit 10 / 1-11 Burns Road, Heathcote NSW 2233 Australia

Ph: +61 2 9545 4433 Email: rfs@rfsales.com.au Website: rfsales.com.au

Global Support

You can receive worldwide support through our network of Global Partners, Distributors, and Service Centres (ODA's).

More than 150 Exclusive local distributors, in over 80 countries.

Service Stations worldwide including:

- Europe - UK, Turkey
- Middle East - UAE
- Asia - India, Singapore
- Australia
- USA - Florida
- Central America - Trinidad
- South America - Brazil



With every Coltraco purchase you receive FREE Lifetime Technical Support in addition to your 3 year warranty on the main unit and 1 year on the sensor.



Coltraco®, Coltraco North America®, Portamarine®, Portalevel®, Permalevel®, Portagauge®, Portasonic®, Portamonitor®, Portasteele®, Portascanner®, Permascanner®, Safesite®, Safeship® are trademarks or registered trademarks of Coltraco Limited, UK. DuPont™, FM-200®, FE-25™, FE-13™, and FE-241™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company and its affiliates. Novec™ 1230 is a trademark owned by 3M.

