



INTRODUCING PORTALEVEL[®] MAX PLUS

World's Leading Most Accurate Ultrasonic Liquid Level Indicator with GAS/LIQUID display



INTRODUCING THE PORTALEVEL® MAX PLUS

Launching the latest model in our Portalevel® Range.

Our brand new **Portalevel MAX® PLUS** takes its place as world's leading, and most accurate contents monitor for liquified gaseous extinguishing systems.

The new display screen on the Portalevel® MAX PLUS makes testing cylinders easy simply showing **LIQUID or GAS**



Intuitive Display

- **Type** – Portable Ultrasonic Liquid Level Indicator
- **Function** – Non-invasive liquid level detection of various fire suppression agent, such as; CO2, FM200™, NOVEC™ 1230, old Halon agents, FE-13™, FE-25™, NAF S III™ and all core Clean Agent systems.
- **Part Number** – 2290334-COMXPS
- **Approvals** – UL Listed, RINA Accepted, ABS Type Approval.
- **IMPA P/N** – 652776
- **Standards** – UKCA, CE, Coltraco is ISO 9001 and ISO 14001 approved



THE NEW PORTALEVEL® MAX PLUS

The **Portalevel® MAX PLUS** offers significant improvements to our existing Portalevel® range with upgraded functionality. All within a smart, ergonomic, portable, durable hand-held enclosure.

GAS/LIQUID Screen Indication

- Intuitive user interface indicates GAS or LIQUID depending on where the sensor is placed on the cylinder.

Three Calibration Modes

- Carefully configured to cater for the different fire suppression cylinders / agents you measure.
- Ensures greater control and success rate when testing, especially on old, damaged or challenging cylinders.

Four Power Settings Increase Gain

- 4 settings ensure the returned ultrasound signal is sufficiently amplified to be easily detected by the transducer.
- Ensures the most accurate measurement possible.

Tactile Buttons

- Improved ergonomics give users greater feel and confidence when operating the **Portalevel® MAX PLUS**.



ADVANTAGES OF THE PORTALEVEL® MAX PLUS

QUICK, ACCURATE AND RELIABLE

Faster Measurement

5-25 seconds
compared to 15
minutes by weighing

Accurate

to +/-1.5mm of the true
liquid level

Three Calibration Modes

For accuracy on a wide
range of agents and
cylinders of varying
size/type and condition

Regulation Compliant

UL Listed, RINA Accepted,
ABS Type Approved



Portable

hand-held device
designed to be used by
1 person

Intuitive

Display/Operation

display for use with
minimal training

Minimise risk

eliminates heavy lifting
or accidental discharges
when weighing

Improve asset safety

keep cylinders in-situ and
fire suppression system on

COMPLY WITH ISO 14520 STANDARDS



STAY COMPLIANT WITH ISO 14520 REGULATIONS

Portalevel® MAX PLUS

New liquid level indicator for a wide variety of fire suppression agents, such as: CO₂, FM200™, NOVEC™ 1230, Halon agents, FE-13™, FE-25™, NAF S III™ and all core Clean Agent systems, accurate to within +/-1.5 mm.



Portasteele® CALCULATOR

Precisely calculate the mass of agent in fire suppression systems to within 1% accuracy using the dimensional data of the cylinder, in combination with the liquid level found using the **Portalevel® MAX PLUS**.

PermaMass® FEATHERWEIGHT

Real-time monitoring of agent mass loss and equivalent pressure loss in inert gas, liquified and non-liquified fire suppression systems to 10g, or less than 1% accuracy above 10 kg total cylinder weight.



Portascanner® AIRTIGHT 520

Leak quantification and air flow rate monitoring for compartments containing high-value assets protected by gaseous extinguishing systems. Detect leak sites as small as 0.06mm, with a tolerance of 0.02mm.



The complete ISO 14520 range for liquid and gaseous fire suppression systems content verification and enclosure integrity monitoring.

STAY COMPLIANT WITH REGULATIONS IMPROVE YOUR SAFETY TODAY.



ISO 14520-1:2015 (Gaseous fire-extinguishing systems – Physical properties and system design – Part 1: General requirements)

Chapter 9.2 Inspection, Clause 9.2.1, **9.2.1.3**: The storage container contents shall be checked **every 6 months** as follows:

- Liquefied gases: for halocarbon agents, if a container shows a loss of agent in quantity of more than 5% or a loss of pressure (adjusted for temperature) of **more than 10%**, it shall be refilled or replaced

Annex F – System Performance Verification

- **Every 6 months**: perform the following checks and inspections:
- for liquefied gases, check weight or use a liquid level indicator to verify correct content of containers; replace or refill any showing a loss of **more than 5%**.

NFPA 2001:2018 (Standard on Clean Agent Fire Extinguishing Systems)

Chapter 8 Inspection, Servicing, Testing, Maintenance, and Training, Clause(s) 8.3, 8.3.1, 8.3.6

NFPA 12:2018 (Standard on Carbon Dioxide Extinguishing Systems)

Chapter 4 General Information, Clause(s) 4.8, 4.8.3, 4.8.3.5, 4.8.3.5.1, 4.8.3.5.2

ACCURATE
INSTRUMENTATION

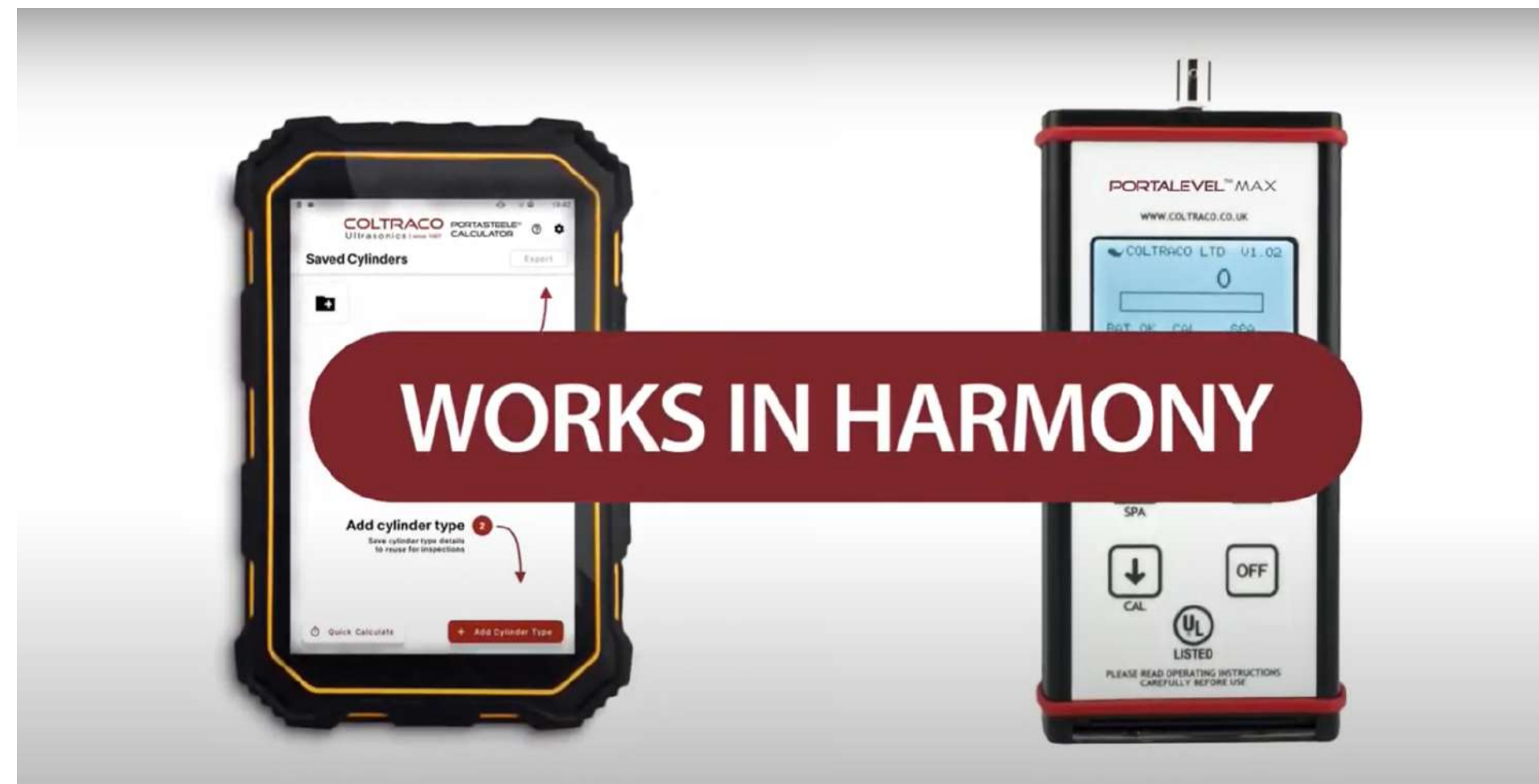
COMPLIES WITH
REGULATION

ENSURES SAFE
INSPECTION

PERFECT PARTNER TO PORTASTEEL® CALCULATOR



1. **Input** your cylinder details and liquid level (as found by Portalevel® MAX PLUS),
2. **Calculate** in under 30 seconds
3. **Save** your results in a spreadsheet and export to the manager/customer thereby enhancing service reports.



Quick Calculate

Calculated Agent Mass

Cylinder Type: Welded | Agent: FM200® | Units: Metric

Volume

Nominal volume

Upper Seam Height
Height from floor to bottom of upper seam

Upper Dome Height
Upper weld seam to cylinder neck

Circumference
Measurement around the cylinder

Liquid Level Height
Height from floor to Portalevel® measurement

Temperature
Temperature of cylinder

Lower Seam Height
Floor to lower weld seam above the skirt

Wall Thickness
Measured using Portagauge® or estimate

Calculate | Cancel

Test Cylinder

Cylinder Type: Seamless | Agent: CO2 | Height: 136.00 cm

45.31 kg
NOT SAVED

Serial Number: SN12347
Identifier for cylinder (optional)

Printed Fill Mass: 45 kg
Used for statistics (optional)

Cancel | Save Record

Saved Records

Tap column header to sort

| Serial Number | Date & Time | Record | Mass Diff. |
|---------------|-----------------|----------------------|------------------|
| SN12346 | 07 Aug 20 14:30 | 110.00 cm → 45.31 kg | 45.00 kg 0.69 % |
| SN12345 | 07 Aug 20 14:14 | 105.00 cm → 43.85 kg | 45.00 kg -2.56 % |

ABOUT COLTRACO ULTRASONICS



Headquartered in **London**

Operating across a diverse array of **25 Market Sectors**

- Shipping
- Safety Engineering
- Process Control
- Mining
- Offshore Energy
- Renewables
- Healthcare
- Built Environment
- Naval
- Space



Our organisation comprises:

- Our **Company**
- Our **Laboratory**, co-located with the Centre for Advanced Instrumentation at 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"



Engaged in Research, Design, Development, Manufacture, Integration & Sustainment of high-exporting advanced technology systems, products and services.

We monitor and measure an array of specialised environments to deliver the Safesite™ on land and the Safeship™ at sea.

BY BEING SCIENCE-LED:



We identify and nurture brilliant minds, creating a unique research environment at Durham University, which is 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 this research and manufacturing excellence, and our enduring commitment to the sustainment of our technologies in the field, that makes Coltraco Ultrasonics the partner of choice for customers and distributors in 120 countries.



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

OUR CUSTOMER CARE COMMITMENT

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.



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