

COLTRACO LIMITED'S FREQUENTLY ASKED QUESTIONS (FAQs)

What is a Portalevel®?

- Portalevel™ is a brand name owned by Coltraco Limited.
- It is a portable ultrasonic liquid level indicator,
- Designed for fixed gas suppression system contents verification eg CO2, FM200, NOVEC, CEA 410, Halons, FE-13 etc

How Does it Work ?

- Portalevel™ works by generating ultrasound into and through the containing walls of the cylinder, and into the liquid gas being tested.
- Since ultrasound moves faster through liquid than air (the reason why whales can communicate at huge distances at sea),
- Portalevel™ is measuring the difference in speed of sound through liquid versus the gas vapours above the liquid level.

So How Long Have You Been Manufacturing ?

Since 1987

Where Do You Manufacture ?

Made in England

Do You have Competitors ?

Of course we do, but we are the world leaders technically and commercially !

What Do You Think of Your Competitors ?

We welcome their participation and think their presence makes us better. We take the view however that they attempt to imitate rather than innovate.

Are Your Competitors Cheaper than Coltraco ?

- No, we have the cheapest portable unit in the world in Portalevel™ Basic, through to the most complex portable unit in the world,
- Portalevel™ Analytical, matching an oscilloscope to a Portalevel™ MAX base unit, enabling not only conventional liquid level indication, but analysis of the ultrasonic waveform behaviours within a holding vessel.
- We are soon to launch Portalevel™ Datalogger, able to record and download 1,000 liquid level readings; this has never been done before.
- No other company in the world has a range of 6 portable liquid level indicators for fixed fire extinguishing systems – soon to be 7



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So What are Coltraco's Key Attributes ?

- Integrity - across all commercial, technical, logistic, service and human levels
- Manufacturing quality products & systems
- Honour - our Royal Naval and family traditions
- Innovation & Exporting

I have Used a Portable Liquid Level Indicator; Readings are Inconsistent Aren't They ?

- They can be if an operator uses the wrong unit, or does not use it properly, or if they are used without regard to the physical properties of the liquid gas being tested.
- CO2 has a critical temperature of 31C for instance. Testing at or above that temperature is pointless. You have to lower the ambient temperature of the CO2 installation to test it reliably.
- This does not apply to FM200, NOVEC, FE-13 or Halons – the latter has a critical temperature point of 55C
- If you were using our old units they were certainly demanding of an operators skill-sets.
- But this is no different to using the old ultrasonic pregnancy scanners; in those days the Nurse had to explain the imagery to parents; now the indications have evolved with clarity of reading, just like our Portalevel™ range of products.

But the Units Don't work on Rusted or Heavily Painted & Re-painted Cylinders, Do They ?

Yes they do, you just need to lightly sandpaper a 1" vertical testing strip area, to remove the anomalies created by external rust or badly oxidised paint coatings, otherwise the ultrasound cannot get into the cylinder. We have "dry" sensors without the need for gel couplant, and "wet" sensors for more demanding work or when time is precious and the operator needs to work more quickly

If I need to Use Gel as a Couplant, Where Can I buy It ?

From us if you wish, but you can also buy any water-based ultrasonic gel from any pharmacist, or use water

I am a Fire Servicing Company; if My Customers Buy Your Units It will Put Me Out of Business, Won't It ?

- No, they need you ! You have the certification, they do not.
- Also, would your customers not think you are better company to give them a unit which enables them to check their fixed fire suppression system contents weekly or monthly, between the statutory checks which they engage you for ?

OK, So if I Buy, Why Should I buy From Coltraco ?

- We are the best at what we do. Our designs are based on Royal Naval Admiralty Research Laboratory expertise in SONAR. Mr Eric Hunter worked on Naval Submarine SONAR for over 30 years before designing the world's first Portalevel™ in 1987.
- We live and breathe our company. We listen to our customers and we operate in 105 countries. 90% of our manufactured products export overseas.
- We supply most of the world's leading Navies & Defence Forces, Offshore-Petrochemical companies, Fire Servicing companies, Power-Generating and electricity & gas Utility companies, Shipping companies and marine servicing companies.
- We are open, transparent and decent – we operate with integrity and family values.
- We do what we say

What Happens if I Damage the Unit ?

- We are the only OEM to offer through-life technical support. All our repairs and calibrations are conducted in-house. We manufacture stock of units and parts.
- Early this year we became the 1st OEM in instrumentation in the world to offer Portacare™ - a Total Care service designed to support products “through-life” on a 1 annual flat-fee basis
- Containing all the costs of inspection, teardown, parts replacement, labour, calibration – plus access to an emergency exchange unit if needed - and 1 way freight cost
- Oh, and you have access to our technicians for telephone teach-ins free of charge, available around your time zone – at any time

I am a Marine Servicing Company; Ships CO2 Systems are Installed in 2-3 or Even 4 Banked Rows of Cylinders. How Can I measure them ?

- By Using our Multi-Bank Extension Rod. This extends the sensor to the 2nd, 3rd and 4th banked rows in an arm, with a right-angled extension head so you keep the sensor on the same position when testing
- We have recently added a small spirit level to help keep the extension rod in the horizontal plane
- We also manufacture a “Mini Multi Bank Extension Rod” which allows for the Asian installations of CO2 systems where the cylinders only have 12-14mm clearance between each cylinder

How Accurate is the Portalevel™ ?

Accurate to +/- 1.5mm, proved by the US Navy who wanted a unit that would be accurate to 1/8th of an inch on their high pressure Halon systems. We supplied 110 units to the US Navy.

Repeatability and Reliability – How Does Portalevel™ Shape Up ?

As long as the operator uses the unit in the same manner we ask it to be in the operating instructions the readings will also be the same.

What is Coltraco’s Key Recommendation for First Time Users ?

Please do not operate the unit until you have read the operating instructions.

Portalevel™ on CO2 is one Thing, But What about FM200™ and NOVEC™; How Do I Test These ?

Instead of calibrating “above level” just calibrate “below”. In fact because FM200 and NOVEC are stored in pressed welded steel cylinders and the steel is more uniform in thickness, they are actually easier.

So What is the Problem with CO2 Cylinders ?

- There is no problem, but the cylinder construction is “spun” at its manufacturing stages, so there exists slight inconsistencies in cylinder wall thickness
- Also do not test at the top or bottom of a CO2 cylinder at the “bow ends” where the steel is thicker; stay a hands width away from these.

What are your Delivery Lead-Times ?

We normally have units available to deliver to you ex-stock

Parts Lead-Times ?

We normally have spare parts available to deliver to you ex-stock

Warranty Period ?

3 years – though Portacare™ Total Care is designed to cover you “beyond warranty” across a 3-5 year term length

How should I Maintain The Unit ?

- Above all, clean it before you pack it away and when you are finished, remove moisture from the main electronic unit and mechanical parts.
- Most damage is caused by users simply not cleaning it, oh, and don't store it for long periods with the batteries installed. Batteries seep over time and corrode the terminals.

Will it work on an Inert Gas ?

No, Portalevel™ is a liquid level indicator and inert gas suppressants are not liquid

Can I Operate the Unit on Any Tank of Any Liquid Gas ?

- Any fixed fire extinguishing cylinder “yes”; any tank of any size – no.
- Oh, and it is not designed for portable extinguishers
- Rule of thumb: if you can easily lift it, then weight it !

OK, So What Happens if I am Testing 30 Cylinders and 1 of Them is Giving an Anomalous Reading ?

Then we are doing our job ! Kindly isolate that cylinder, inspect it and, if necessary, dismantle and weigh it. Portalevel™ is an “indicator” and its job is to indicate concerns for you to check further.

Fixed Monitoring Systems – my Customer wants to Monitor Their Fixed Fire Suppression System 24/7; Can you Help ?

- Yes we can. We manufacture **Permalevel™**, the worlds 1st fixed single point permanent monitoring system for CO2, FM200, NOVEC and any other liquid gas
- But, if you wait another month, we will be releasing **Permalevel™ Multiplex**, able to monitor 20 x liquid level points per module
- Equipped with both local indication and relays, so you can remote the signals to a central alarm monitor control point

What other Products do Coltraco Manufacture for the Fire Industry ?

- Portagauge™ III – a portable ultrasonic thickness gauge for cylinder and pipework corrosion monitoring, and
- Portasonic™ - a portable ultrasonic flow meter for water sprinkler systems or fire hydrant flow rates – this would also help identify blockages or build-up in the pipes
- Portascanner™ - we are exploring whether our portable watertight integrity test indicator could also be used to support room integrity testing

Thank you & we hope these FAQs are helpful.