



# Measurement Solutions for the Seafood Industry

A business of

CallaghanInnovation



## VALUE TO INDUSTRY

- Make more confident decisions
- Providing measurement confidence to regulators
- Get more consistent outcomes
- Use measurement strategies to solve problems
- Calibrate to international standards of measurement
- Optimise processes and product development
- Cut performance and regulatory risks

**Measurement is critical** to the seafood industry, whether it is to maintain and protect the current system or to develop new technologies.

The Measurement Standards Laboratory finds solutions – with smart strategies for measuring and controlling temperature, humidity, mass, pressure, light, colour, electricity, length, time, and frequency.

We are New Zealand's official measurement standards body – the source of traceable links to international standards of measurement and your best link to accredited local testing and calibration laboratories.

As well as offering expert consultancy, our scientists can develop specialist calibrations to support device manufacturers or improve your current system.

Whether it's the accuracy of thermometers used in storage, length gauges used for sizing seafood, or light and colour measurements considered in designing nets, we can help.

If there's an inconsistency you can't explain, a big decision that turns on a tiny variable, or any other measurement challenge, get in touch.



## CASE STUDY

**The Challenge** – The Ministry of Primary Industries enforces a quota system, put in place to protect valuable NZ seafood resources and ensure they remain sustainable for the future. Size limits are in place for crayfish, which are realised through either the escape holes on lobster pots or by a gauge used for measuring the tail size. Since these are used for enforcement purposes and may be relied upon in prosecution, it is important they are accurate to provide confidence in the measurements for both the court and the fisheries officer.

**The Solution** – The Measurement Standards Laboratory verifies the accuracy of a new set of crayfish gauges every year to be within a required tolerance of 0.05 mm with a measurement uncertainty of 0.01 mm. A calibration report is provided, which is traceable to the International System of Units to provide the level of measurement confidence required by all parties.

**The Result** – The size limits provide long-term sustainability to the crayfish industry. This has been a success story for science, measurement, and ultimately the economy, and behind the scenes MSL underpins it with credible precision measurement.

## CONFIDENT DECISIONS

To make the best decisions you need accurate and reliable measurements and a sound grasp of the measurement uncertainties that can influence outcomes and build trust amongst your users, your customers, and investors. The Measurement Standards Laboratory can help you get it right.

- We've worked with refrigerating companies to help ensure that the temperature profile within their cool stores is maintained within appropriate tolerances, and designed portable unpowered insulated enclosures for reliable transportation of cooled products to remote locations.
- We can give advice on measuring and controlling light, for example to improve safety on board, or to enhance capture when using UV or visible light to attract fish or controlling the colour and appearance of nets.



## WE'VE GOT YOUR MEASURE

The Measurement Standards Laboratory is the home of New Zealand metrology, so we can offer expert measurement advice, training, and calibration services to those working in harvest, supply, and enforcement in the seafood industry.

We can calibrate or provide advice on the calibration of a range of instruments used for measuring length, temperature, or humidity, and provide measurement uncertainties that better define a device's performance and reliability.

Whether you are designing a new device or looking to maintain or improve your current measuring system, we can help you reduce risk through high-quality measurement science or help you navigate any relevant documentary standards, and determine how your device measures up to internationally-recognised standards.



### CONTACT US

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