



Safety in numbers

bulker safety measures



Jay Venter

Watertightness matters

Ships pay a high price if dry cargo mistakenly comes into contact with sea water. It causes huge concern within the shipping industry as the level of damage is often significant and incurs high-value insurance claims.

A fast and effective method of evaluating and testing cargo hold hatch covers and door seals to determine water leaks and weather tightness is essential to preventing these incidents. Cygnus Hatch Sure ultrasonic hatch leak detector is purpose-built to provide exactly that, is ABS type approved and accepted by P&I clubs.

Cygnus Instruments was born in the marine industry, specifically among ship surveyors and commercial divers, and hold a knowledge of the industry and its challenges that is second to none. Four decades on, now world renowned as the inventors of easy to use, highly accurate ultrasonic thickness gauges, Cygnus products cover a broad spectrum of subsea and surface inspection applications.

Although the Hatch Sure is not concerned with thickness measurements, Cygnus' knowledge of the industry and ultrasonic technology undoubtedly translates into this impressive tool.

LOCATING LEAKAGE IN HATCH COVERS OR DOORS WITH PINPOINT ACCURACY

The Hatch Sure system consists of a powerful and robust battery powered transmitter containing 19 ultrasound emitters (40kHz). These emitters are deliberately arranged to produce an omnidirectional sound field, uniformly distributed throughout the cargo hold. The receiver simultaneously displays the

sound energy level that passes through the enclosed cargo hold, enabling the user to identify the exact location of leakage accurately and quickly.

Speed and convenience are central to the Hatch Sure's usability. Most notably, inspections can be conducted with cargo in place. This extremely lightweight unit is easily transportable. Users can hand-carry in a rucksack-style carry case or take



advantage of the built-in neck and wrist straps for hands-free use. What's more, the transmitter is supplied with a sling and four anchor points allowing it to be suspended in the cargo hold.

In place of hose testing, the Hatch Sure is an environmentally friendly and vastly more efficient option for bulk cargo carriers; the dominant users of this device. However, the Hatch Sure can be applied beyond the evaluation of cargo hold hatch covers. The transmitter features 6 selectable pre-set power levels that permit it to adjust to the scale of the test area, such as small cabins or any confined spaces.

Essentially any opening that needs to be sealed; watertight doors, hold access covers, small yacht and boat cabin hatches, bulkhead doors on marine vessels and watertight doors on offshore oil and gas platforms are equally in need of testing. Plus, more applications have been collecting in the pipeline, as the true

versatility of this device continues to grow.

The Cygnus Hatch Sure transmitter and receiver both have a three-year warranty, and like all Cygnus products, is manufactured in the UK, and now holds

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the UKCA mark too.

More information about the Hatch Sure can be found on Cygnus Instruments' website, where quoting 'DCI22' can also get customers 10% off on a gauge.

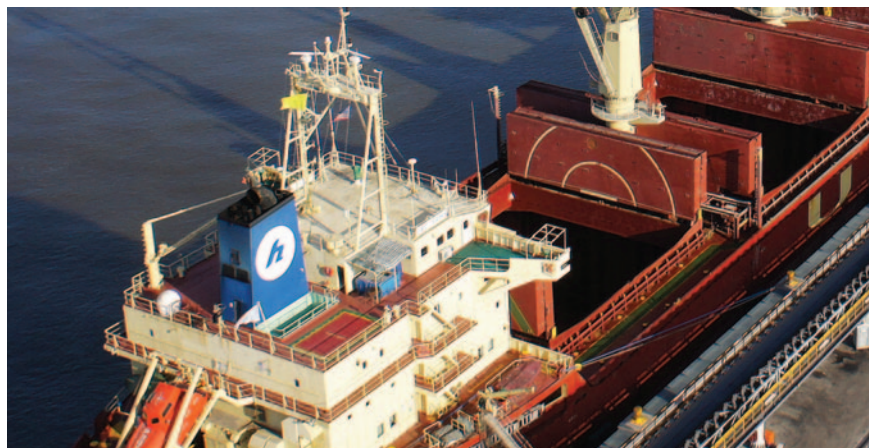
'SEAFLO NEO SL M' with the latest silyl methacrylate antifouling technology

Chugoku announced in December 2021 the release of its ultra-low friction, hydrolysis antifouling 'SEAFLO NEO SL M' with the latest silyl methacrylate antifouling technology.

In 1995 CMP launched the original silyl acrylate antifouling under the brand SEA GRANDPRIX to replace TBT antifouling coatings without sacrificing antifouling performance. SEA GRANDPRIX quickly became the first product of its kind widely applied for shipbuilding and dry-dockings for maintenance.

In 2011 CMP introduced SEAFLO NEO SL providing a low friction technology. Then in 2014, CMP further introduced the new generation of silyl methacrylate antifouling, SEAFLO NEO SL Z, a premium grade addition to CMP's antifouling portfolio which utilizes a binder of tri-isopropyl silyl methacrylate, 'TIPSMA' a polymer formulated to further control the leach rate of the active ingredients and enhance ultra-low friction performance. To date, SEAFLO NEO SL Z has been applied to more than 800 ships for newbuildings and drydock repair projects.

The antifouling surface built by 'TIPSMA' technology provides for a minimal average leach layer under all operation conditions including high seawater temperatures and low activity, continuously renewing itself by a controlled self-polishing mechanism



allowing for ultra-low friction and antifouling protection over a longer period of time.

With more than 25-year experience of silyl antifouling technology, Chugoku is proud to introduce the newest addition to its TIPSMA antifouling range, for which less than 2.5% average speed loss can be expected to achieve a 7.5% reduction of CO₂ emission over a 60-month operational period (utilizing ISO 19030*).

Available at the end of 2021, SEAFLO NEO SL M is designed for use on a wide variety of ships and features:

- ❖ TIPSMA based antifouling;
- ❖ ultra-low friction technology, low Friction Increase Ratio (FIR**) of 1.5%;
- ❖ expected maximum average speed loss of 2.5% for 60 months;

- ❖ excellent static performance up to a 30-day single idle period; and capable of up to 90-month service.

SEAFLO NEO SL M is available for both newbuildings and drydock repair projects. It is designed to maintain antifouling performance for a long period of time regardless of the type of a ship, and can be expected to reduce CO₂ emitted from ships.

*ISO 19030 is an international standard for "Ship and Marine Technology – Measurement of Changes in Hull and Propeller Performance".

**FIR is an indicator developed by CMP in collaboration with the National Maritime Research Institute and Tokyo University of Science to estimate friction resistance.