



## Confirmation of Product Type Approval

**Company Name:** CYGNUS INSTRUMENTS LIMITED

**Address:** CYGNUS HOUSE, 30 PRINCE OF WALES ROAD, DORCHESTER, United Kingdom, DT1 1PW

**Product:** Tightness Detection System

**Model(s):** MKII-HLD

**Endorsements:**

<b>Certificate Type</b>	<b>Certificate Number</b>	<b>Issue Date</b>	<b>Expiry Date</b>
Product Design Assessment (PDA)	19-LD1809138-PDA	07-FEB-2019	06-FEB-2024
Manufacturing Assessment (MA)	19-NC3704874	22-JUL-2019	30-JUL-2024
Product Quality Assurance (PQA)	NA	NA	NA

### **Tier**

3 - Type Approved, unit certification not required

### **Intended Service**

Weather and water tightness testing system used on ABS vessels and offshore units. Primary function is to test cargo hatch cover for water tightness but can also be used to check tightness of doors, windows, ramps and bulkheads.

### **Description**

The portable system comprises a battery operated micro-processor controlled receiver and a transmitter, both operating at 40 kHz to produce a uniformly distributed omni-directional ultrasound field, connects to a 12 mm diameter inspection microphone mounted on a telescopic arm with cables. This unit allows tightness measurements to be taken in dB or open hatch values. A rotary switch with five position selections is implemented on the transmitter. The function of the rotary switch is to allow the user to adjust different power outputs, which could be used for testing such as internal water tight doors.

### **Ratings**

Power supply: Transmitter 6 Rechargeable NiMH (or 6 disposable) AA batteries or external 12-24 DC V Power source, Receiver: 1 PP3 9V battery;

Enclosure rating: Transmitter:IP40; Receiver: IP65

### **Service Restrictions**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. Not suitable to be used in hazardous environment.

### **Comments**

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

**Notes, Drawings and Documentation**

Drawing No. NA, Expanded Technical Explanation, Revision: 1, Pages: 1

Drawing No. Cygnus Hatch Sure Technical Specifications, Cygnus Hatch Sure Technical Specifications, Revision: 2 Pages: 2

Drawing No. M1-HLD-M-ENG, Cygnus Hatch Sure Operating Manual, Revision:11, Pages: 62

**Term of Validity**

This Product Design Assessment (PDA) Certificate 19-LD1809138-PDA, dated 07/Feb/2019 remains valid until 06/Feb/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

**ABS Rules**

- Marine Vessel Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-9-8/7, 4-9-8/13, 4-9-8/Table1
- Facilities on Offshore Installations Rules (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3
- Mobile Offshore Units Rules (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13
- Steel Vessels for Service on Rivers and Intracoastal Waterways Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4
- High Speed Crafts Rules (2019): 1-1-4/11.9, 1-1-A2, 1-1-A3
- Steel Barge Rules Rules (2019): 1-1-4/7.9, 1-1-A3, 1-1-A4

**International Standards**

IACS UR E10 Rev.6 2014

**EU-MED Standards**

NA

**National Standards**

NA

**Government Standards**

NA

**Other Standards**

NA



A handwritten signature in blue ink, appearing to read "Joseph W. White".

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 03-Feb-2021 4:07

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.