



CERTIFICATE NUMBER  
18-HS1751245-PDA

DATE  
19 Jun 2018

ABS TECHNICAL OFFICE  
Houston ESD - Piping

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## CERTIFICATE OF Design Assessment

This is to certify that a representative of this Bureau did, at the request of

### **TURNER DESIGNS**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Ballast Water Analyzer**

Model: **8500-XXX**

This Product Design Assessment (PDA) Certificate 18-HS1751245-PDA, dated 19/Jun/2018 remains valid until 18/Jun/2023 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.

AMERICAN BUREAU OF SHIPPING

*Dustin De Los Santos*

Dustin De Los Santos  
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standard. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A5/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**TURNER DESIGNS**

1995 N. 1ST STREET

SAN JOSE CA

United States 95112

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Email: Sales@turnerdesigns.com

Web: www.TurnerDesigns.com

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**Tier: 2 - PDA Issued**

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**Product:** Ballast Water Analyzer**Model:** 8500-XXX**Intended Service:**

Marine and Offshore Application - To be used for testing ballast water.

**Description:**

The Ballast-Check 2 instrument is a handheld fluorometer that is used to assess algal cells of the 10-50 micron size class in ballast water by providing Abundance (cells/ml count) and Activity (cell viability or reproductive capability) estimates, which are used to indicate the risk of exceedance of ballast water discharge standards.

**Rating:**

Power: Four (4) AAA batteries

Viable Organisms (algal cells) Testing Size: 10 to 50 um

Testing Range\*:

Abundance of Algae: 1 to 2000 cells/mL

Activity of Algae (Viability Ratio): 0.01 to 0.75

Temperature: 41°F to 104°F (5°C to 40°C)

Case Enclosure: IP67

\* Read Ballast-Check 2 User's Manual for Definition, Interpretation of Testing Results, etc.

**Service Restriction:**

1. 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.
2. Not to be used in hazardous locations.

**Comments:**

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

**Notes/Drawing/Documentation:**

Drawing No. 8500-100 BC2 Bill of Materials, 8500-100 BC2 Bill of Materials

Drawing No. 8500-10X BC2 Assembly Drawing, 8500-10X BC2 Assembly Drawing, Revision: J

Drawing No. 998-8501 BC2 Manual, 998-8501 BC2 Manual, Revision: Q

Drawing No. 998-8502 BC2 QSG, 998-8502 BC2 Quick Start Guide, Revision: G

Drawing No. S-0150 BC2 Datasheet, S-0150 BC2 Datasheet, Revision: J

Drawing No. TD130323 BC2 Test Procedure, TD130323 BC2 Test Procedure, Revision: G

**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1 - 2018 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2018 Steel Vessels: 4-8-3/1.7, 1.11.1, 1.17.1

Rules for Conditions of Classification, Part 1 - 2018 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

2018 Mobile Offshore Drilling Units: 4-3-1/11, 13, 17.1

**National:**

NA

**International:**

NA

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA