

CERTIFICATE NUMBER
14-HS1243044-PDA

DATE

08 October 2014

ABS TECHNICAL OFFICE

Houston SED - Ship Equipment

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of **DEEPSEA POWER AND LIGHT - SAN DIEGO**

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:

Battery

MODEL:

SB-12/80, SB-24/40, SB-48/18 & SB-6/174

This Product Design Assessment (PDA) Certificate 14-HS1243044-PDA, dated 08/Oct/2014 remains valid until 07/Oct/2019 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

Mohamed C Boukameha

Engineer

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 standards. 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-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

DEEPSEA POWER AND LIGHT

4033 RUFFIN ROAD SAN DIEGO CA 92123-1817

United States

Telephone: 858-576-1261 Fax: 858-576-0219

Email: kevin hardy@deepsea.com

Web: www.deepsea.com

Tier: 2

Product:

Battery

Model:

SB-12/80, SB-24/40, SB-48/18 & SB-6/174

Intended Service:

Pressure Compensated Submersible DC Electrical Power System.

Description:

Sea Battery.

Ratings:

Power: 6 Volts, 180 A.H;12 Volts, 80 A.H; 24 Volts, 40 A.H; 48 Volts, 18 A.H; Temperature Range: Charge - 15 °C to 50 °C (5 °F to 122 °F); Discharge -20 °C to 60 °C (-4 °F to 140 °F);

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.

(1) The batteries are not to be used in Hazardous Areas see Steel Vessels Rules 4-8-3/13.1

Comments:

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

Notes / Drawings / Documentation:

Supporting Documentation:

Book: 1. Background, 2. Model/Brochure, 3. Testing, 4. Drawings, 5. Brochure, 6. Report Material Safety, 7. Brochure/User's Guide;

Sea01: 1. Background/Report, 2. Brochure, 3. Procedure/Specifications, 4. Pressure Test Report, 5. Brochure, 6. Letter Environmental-Transportation, 7. Assembly/Conditioning Batteries Prior to Sea Battery, 8. Sea Battery QC Check-Off Sheet;

Term of Validity:

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STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part 1 - 2014 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4 which covers the following:

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Steel Vessel 4-8-4/5.11, 5.1.2, 5.1.3 & 5.3.1(c);

Rules for Building and Classing Underwater Vehicles, Systems and Hyperbaric Facilities - 2014 Section 10/11.1.1, 11.3.1, 11.3.2, 11.3.3, 11.3.4, 11.3.6, 11.3.7 & 11.7

National:

NA

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

None.