



American Bureau of Shipping (China) Ltd

Refer To: ZW/LL
File Ref: T-8-6
Task No: T1572133
PID.: 3815655
Date: 11 November 2016

Product: FRP Grating
Model: Sui Generis-IFR
Type Approval – Product Design Assessment

Nantong Sui Generis Composite Co., Ltd.

No. 876 Chenggang Road,
Nantong, Jiangsu, 226003
P. R. China

Attn: Ms. Jing, Xiao-Ju,

Madam:

We have received your declaration stating that the materials in the requested assessment are free from Asbestos and your application for ABS Type Approval dated 13 October 2016 requesting our renewal of your DA certificate No. 06-SQ202802-1-PDA for the subject product. Having reviewed the enclosures in accordance with the following Standards/Codes,

1. ASTM E84-16(2016);
2. Applicable Rules as listed in certificate listing "ABS Rules".

we are pleased to advise that we have completed the Product Design Assessment (PDA) phase of the type approval process. Enclosed is your original copy of the PDA. Your details are published on our web site at www.typeapproval.org and can also be downloaded there.

Please note that DA certificate with 06-SQ202802-1-PDA has been updated by the DA certificate with No. 16-DL1572133-PDA.

Please be sure that you understand the scope and conditions of the validity of the certificate. An assessment is not an approval. As applicable, the PDA is a generic assessment of materials, components, products or systems for a specific use in compliance with the Rules, Guides and recognized standards. In essence the final approval is given when an Engineer or Surveyor accepts it for a specific user and installation. Therefore, the PDAs are written assuming that the end user and installation of the product is unknown, and that the manufacturer may not apply for Manufacturing Assessment.

In particular we draw your attention to the pages attached to the PDA and the restrictions that may affect its use.

Unit Certification is not required for this product. If you or your purchaser requests an ABS Certificate for compliance with a specification or standard; the specification or standard, including inspection standards and tolerances, you must clearly define the conformity criteria.

This Product Design Assessment (PDA) is intended for products to be used on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product. The use of the product in a non-ABS classed vessel, MODU or facility is to be mutually agreed between your company and your client.

(.....P.2/-)

ABS GREATER CHINA DIVISION

3RD FLOOR, SILVER TOWER, NO. 85 TAOYUAN ROAD, HUANGPU DISTRICT, SHANGHAI, 200021, P. R. CHINA
TEL: 86-21-23270888 FAX: 86-21-63229649 WWW.EAGLE.ORG



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We recommend that you monitor the ABS Rules, Guides and other standards used in the approval. These Rules, Guides and standards often change on an annual basis, and you must comply with the new Rules, Guides and standards in order for the product to be used on an ABS classed vessel or facility contracted under the new Rules, Guides or specifications.

We do caution you that the use of the ABS logo is copyrighted. However, our "Design Assessed" logo may be used as long as your PDA remains valid.

Our "Product Type Approval" Logo may be used as long as you have an ISO9001 Certified Quality System (or equivalent) and you are conducting regular ABS Manufacturing Assessment audits of your manufacturing process. Should you desire to continue with Product Type Approval, please contact the ABS Office at Shanghai, Tel: (86)-021-23270888, Fax: (86)-021-63605391. The office will arrange for the production testing as may be necessary and audit of your quality assurance and control arrangements. To find another office, please use the directory of ABS offices on the ABS Web Site at www.eagle.org. You may also ask the ABS Program staff at Tel. (281) 877-6107, Fax (281) 877-6591, or e-mail absta-programs@eagle.org.

A copy of the artwork for the Design Assessed and Type Approved logos may be requested from our email address absta-programs@eagle.org. Please be aware that both logos are not to be used at the same time. For a copy of the art work and detailed guidance on their use, please contact absta-programs@eagle.org.

We have received your Declaration of Conformity stating that there have been no modifications of the product from previous design assessment.

An electronic copy of the submitted document, appropriately stamped is available through the ABS Eagle Construct Engineering Manager (O2E), Web Portal.

An invoice covering our fee for the above approval has been forwarded to you separately. This is a technical service fee and is separate from and in addition to any fee which may be charged for service rendered by our field Surveyor.

Thank you for considering ABS for your certification needs. If you should have any comments relative to the scope and conditions of the assessment of your product, or if we can be of any further assistance, please do not hesitate to contact Zheng Wang at 86-411-39989767-30121 or the undersigned at 86-21-23270958. In case of inquiry by a phone or reply by a document, please inform or refer to Task No. & the date of this letter.

Very truly yours,

ABS

Bill W. Shi

**Vice President of Engineering
Greater China Division**

By: _____

Yi Fei

Manager

Ship Engineering Department

Encl: as stated

cc: ABS GC Opts w/p and copy of DA Certificate

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Drawing List

Engineering Office:	CN DL Bureau China DL Eng	
Submitter:	NANTONG SUI GENERIS COMPOSITE CO., LTD. (425696)	
Drawing No	Revision No	Drawing Title
2016BRTC07286	1	Test report

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CERTIFICATE NUMBER
16-DL1572133-PDA

DATE
11 Nov 2016

ABS TECHNICAL OFFICE
CN DL Bureau China DL Eng

CERTIFICATE OF DESIGN ASSESSMENT

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

NANTONG SUI GENERIS COMPOSITE CO., LTD.

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: **FRP Grating**

Model: **Sui Generis-IFR**

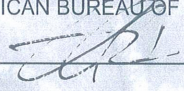
This Product Design Assessment (PDA) Certificate 16-DL1572133-PDA, dated 11/Nov/2016 remains valid until 10/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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


Yi Fei
Manager

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-A/3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

NANTONG SUI GENERIS COMPOSITE CO.,LTD

NO. 876 CHENGGANG ROAD

NANTONG JIANGSU

China 226003

Telephone: 86-513-85560011

Fax: 86-513-85560033

Email: info@nantong-suigeneris.com

Web: www.strongfrp.com / www.nantong-suigeneris.com

Tier: 2 - PDA Issued

Product: FRP Grating

Model: Sui Generis-IFR

Intended Service:

1. Personnel walkways, catwalks, ladders, platforms or access areas in open decks.
2. All personnel walkways, catwalks, ladders, platforms or access areas in cargo tanks, fuel oil tanks, ballast water tanks, cofferdams void spaces and pipe tunnels, where these space are not normally entered when underway.

Description:

Sui Generis Molded (Isophthalic Polyester Resin) Fiberglass Reinforced Plastic (FRP) Grating - Fire Resistant

Rating:

Flame Spread Index < 25

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. This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific requirements).
3. Not to be used as walkways or areas, which may be used for escape or access for firefighting, emergency operation or rescue in open decks.
4. Not complying with the requirements on L1/L2/L3 as per Appendix 3 Fiber Reinforced Plastic (FRP) Gratings of ABS Guide for Building and Classing Facilities on Offshore Installations.

Comments:

1. Unless specially directed by Administration, this approval is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS (2014 Consolidated Edition). The USCG have their own requirements for FRP Grating.
2. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
3. This approval was not done on behalf of a particular Administration.

Notes/Drawing/Documentation:

Test report No. 3103368SAT-001 dated September 11, 2006

(Issued by Intertek Testing Services NA, Inc. USA) (Ref. Task No. 202802)

Test report No. 2016BRTC07286 dated July 11, 2016

(Issued by Suzhou American Standard Detection Technology Co., Ltd IQ Center)

Terms of Validity:

This Product Design Assessment (PDA) Certificate 16-DL1572133-PDA, dated 11/Nov/2016 remains valid until 10/Nov/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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STANDARDS

ABS Rules:

- Steel Vessel Rules (2016): 1-1-4/7.7, 1-1-A3 and A4
- Steel Vessels Under 90 Meters (295 Feet) in Length (2016): 1-1-4/7.7, 1-1-A3 and A4
- Facilities on Offshore Installations (2016): 1-1-4/9.7, 1-1-A2 and A3
- Offshore Support Vessels (2016): 1-1-4/7.7, 1-1-A3 and A4
- Mobile Offshore Drilling Units Rules (2016): 1-1-4/9.7, 1-1-A2 and A3
- Steel Vessels for Service on Rivers and Intracoastal Waterways (2016): 1-1-4/7.7, 1-1-A3 and A4
- Bulk Carriers for Service on the Great Lakes (1978, Up-dated April 2008): 1-1-4/7.7, 1-1-A3 and A4
- High-Speed Craft (2016): 1-1-A2 and A3, 1-1-4/11.9
- Steel Barge Rules (2016): 1-1-A3 and A4, 1-1-4/7.7

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

ASTM E 84-16(2016)