



TYPE APPROVAL CERTIFICATE

Certificate No:
TAS00001CN
Revision No:
1

This is to certify:

That the Fender

with type designation(s)
Ocean Guard

Issued to

ShibataFenderTeam AG
Hamburg, Germany

is found to comply with
Guidelines for the Design of Fender Systems : 2002 (PIANC 2002)

Application :

Foam filled floating fender for marine application

Issued at **Hamburg** on **2023-03-28**

for **DNV**

This Certificate is valid until **2028-03-27** .

DNV local unit: **Hamburg**

Approval Engineer: **Joachim Rehbein**

Thorsten Lohmann
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 281

Revision: 2022-09

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Product description

Ocean Guard: PU coated – PE Foam Filled Fender

Size: diameter [mm]: 400 up to 4500

length [mm]: 10000

Assessed production site

- Marine Fender International Inc., 452 West Valley Blvd, Rialto, California 92376, United States of America;
- ShibataFenderTeam AG Werk Rechlin / Production Plant, Ahornstraße 8, 17248 Rechlin, Germany.

Application/Limitation

This type of fender is approved according to the 'Guideline for the design of Fender Systems: 2002, Appendix A – Constant Velocity' issued by the International Navigation Association (PIANC).

Any significant changes in design and/or quality of the material will render the approval invalid.

If there are any changes to the product design, the design documentation and / or the Type Approval certificate, information about this and revised documentation shall be sent to the DNV local office.

This Type Approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV.

Type Approval documentation

- Initial TE – documentation for KBZ 1244 HH

Renewal documentation 2018:

- A0422078_SFT Ocean Guard Fender - Renewal TA Assessment Report (90.02a) - 2018-01-11
- A0431701_MFI Ocean Guard Fender - Renewal TA Assessment Report (90.02a) - 2018-01-11
- A0460772_ShibataFenderTeam_F4_Rechlin - Renewal TA Assessment Report (90.02a)
- Supporting documentation ((TDS, product catalogue 08/2017 E, deflection, and material tests)

Renewal documentation 2023:

- Application for type approval TAA901 of 2022-09-01;
- Type approval assessment report TA 401 of 2022-11-10 at ShibataFenderTeam AG, Hamburg, Germany;
- Supporting documentation:
 - Fenderpassport SFTG-5460-1767;
 - COT G2210074298_n;
 - 1767_ITP Foam Products_5460;
 - Material base test-nylon_SFT / foam_SFT / foam_MFI;
 - Ocean Guard Fender Rechlin_tested at Shibata_2300-14;
 - MFI-Commercial Testing Report_University of Washington;
 - Ocean Guard Fenders - foam unit.

Tests carried out

According to Type Approval documentation.

Marking of product

Product shall be marked with manufacturer's name and type designation.

The marking is to be carried out in such a way that it is visible, legible, and indelible. The marking of product is to enable traceability to the DNV Type Approval certificate.

Periodical assessment

Periodical assessments will be carried out bi-yearly (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

When possible, these assessments may be harmonised with normal surveys for product certification and / or other surveys and audits carried out.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE