



TYPE APPROVAL CERTIFICATE

Certificate No:
TAS00001MM
Revision No:
2

This is to certify:

That the Fender

with type designation(s)
CSS Cell Fender

Issued to

ShibataFenderTeam AG
Hamburg, Germany

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

Application :

Moulded rubber 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.



Product description

CSS Cell Fender: Moulded rubber

Size H [mm]: 400 up to 3000

Rubber Grades: G0.9 up to G3.1

Assessed production site

- Shibata Industrial Co., Ltd., 1058 Nakao, Uozumi-cho, Akashi-city, Hyogo-pref., 674-0082, Japan
- Shibata Asia Sdn. Bhd., No. 7, Jalan Korporat 1B/KU9, Taman Perindustrian Meru, 42200 Klang, Selangor, Malaysia

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 2002).

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 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 certificate KBZ 1163 HH

Renewal documentation:

- Renewal TA Assessment Report (90.02a), 2017-11-28 at Shibata Industrial Co, Japan
- Renewal TA Assessment Report (90.02a), 2017-11-21 at Shibata Asia Sdn. Bhd., Malaysia
- Supporting documentation (TDS, product catalogue 08/2017 E, deflection and material tests January 2017 and April 2016 at Shibata Asia Sdn. Bhd., Malaysia)

Modification of certificate TAS00001MM rev 01 (additional production site):

- Application for type approval TAA 901 of 2021-03-20;
- Type approval assessment report TA 401 of 2021-12-02;
- Inspection report SFTM-0457-2021 issued by Shibata Asia Sdn. Bhd., No. 7, Jalan Korporat 1B/KU9, Taman Perindustrian Meru, 42200 Klang, Selangor, Malaysia, of 2021-12-03;
- Certificate of Inspection F580101/KL/IN/10124 issued by SGS of 2021-12-03.

Renewal documentation 2023:

- Application for type approval TAA901 of 2023-01-19;
- Type approval assessment report TA 401 of 2023-03-31 at ShibataFenderTeam AG, Hamburg, Germany;
- Supporting documentation:
 - # SFT_Physical Properties + Fender Testing;
 - 1 Shipment SFTG-5314-2022 CSS2250 (G2.7);
 - [SGS] 1 Shipment SFTG-5314-2022 CSS2250 (G2.7);
 - SFTG-5164-2021 Oman India Fertilizer CSS1450 (F0+10) 2pcs;
 - CSS Fenders - rubber 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).



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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