

# TYPE EXAMINATION CERTIFICATE

**This is to certify:**

**That the Fender**

with type designation(s)  
**SPS Cone Fender**

Issued to

**Shibata FenderTeam 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 **2018-08-23**

for **DNV GL**

This Certificate is valid until **2023-08-22**.

DNV GL local station: **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 Examination Certificate and not to the approval of equipment/systems installed.



## Product description

SPC Cone Fender: Moulded rubber

Size Height [mm]: 300 up to 2000

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., Lot PT, 34252 Jalan Sekolah, 42100 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).

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 TE certificate, information about this and revised documentation shall be sent to the DNV GL local office.

## Type Examination documentation

- Initial TE – documentation for certificate KBZ 1164 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 and April 2018 and April 2016 at Shibata Asia Sdn. Bhd., Malaysia)

## Tests carried out

According Type Examination 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 GL Type Examination Certificate.

## Periodical assessment

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

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

A Type Approval Certificate may be renewed for a further period of validity, at the customer's request. An application for renewal shall be submitted to the DNV GL local office.

END OF CERTIFICATE