DNV·GL

Certificate No:
TAS000015R

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Fender

with type designation(s)
CF (Cylindrical Fender)

Issued to
Trelleborg Engineered Systems (Qingdao) Co., Ltd.
Qingdao City, China

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

Application :

Solid rubber cylindrical fender for marine application

Issued at **Hamburg** on **2017-08-25**
This Certificate is valid until **2022-07-31**.
DNV GL local station: **Qingdao**

Approval Engineer: **Joachim Rehbein**

for **DNV GL**

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.

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Job Id: **262.1-026282-1**
Certificate No: **TAS000015R**

Product description

CF: Solid rubber cylindrical fender

Size: 100 x 50 - 2700 x 1300 [OD x ID mm]
Grade: refer to Technical Manual

Assessed production site

Trelleborg Engineered Systems (Qingdao) Co., Ltd
No. 35, Ronghai 4 Road, Chengyang Qingdao 266111, China

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

Tests carried out

- Deflection performance tests, dated 2017

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

For retention of the TE certificate in its validity period is that periodical assessments are successfully carried out.
The objective of the periodical assessment is to verify that the conditions for the TE have not been altered.
Periodical assessments will be carried out bi-yearly. 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