

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Lifting Gear**

with type designation(s)
Spreader beams type OX-SB

Issued to

CARGO FLET BLASANT
Sant Boi de Llobregat, Barcelona, Spain

is found to comply with

DNV GL standard DNVGL-ST-0378 – Standard for offshore and platform lifting appliances
DNV GL standard DNVGL-ST-0377 – Standard for shipboard lifting appliances

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2018-08-23**

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

DNV GL local station: **Barcelona**

for **DNV GL**

Approval Engineer: **Antonio Sendin Alvarez**

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Aldo Matteucci
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.



Product description

Spreader beams with the following designation:

- OX-SB-09
- OX-SB-17
- OX-SB-24
- OX-SB-34
- OX-SB-50
- OX-SB-70
- OX-SB-110
- OX-SB-110-170
- OX-SB-170
- OX-SB-170-250
- OX-SB-250
- OX-SB-250-400
- OX-SB-400
- OX-SB-400-600
- OX-SB-600
- OX-SB-800
- OX-SB-1350

The safe working loads for each spreader beam/configuration to be in accordance to the stamped report
Table load vs span OX-SB ()*

Dynamic amplification factor (DAF) in accordance to ST-0378 Clause 8.2.2.1

Design temperature = -20 °C

Application/Limitation

1. All materials are to be delivered with 3.1 certificates, documenting mechanical properties and chemical composition in accordance with the DNVGL-ST-0378 Sec. 3
2. Welds and NDT to be carried out by certified personnel and in accordance to DNVGL-ST-0378 Sec.3
3. It is the responsibility of the Holder of the Certificate to ensure that both design and production are in compliance with Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.

Type Approval documentation

Tests to be carried out

Prototype tests carried out for spreader beams SWL = 70 tonnes and 170 tonnes the 14th of August 2018 and witnessed by DNV GL Sandefjord

In order to obtain a CG3 certificate, each spreader beam shall be tested according to the DNVGL-ST-0378 Table 14-2 and NDT to be carried out according to DNVGL-ST-0378 Sec.3

Marking of product

Each spreader beam is to be marked according to DNVGL-ST-0378 Sec.14.5.

Periodical assessment



Job Id: **262.1-028237-1**
Certificate No: **TAS00001EK**

For retention of the Type Approval, a DNV GL Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNVGL-CP-0338.

END OF CERTIFICATE