

TYPE APPROVAL CERTIFICATE**This is to certify:****That the Lifting Gear**with type designation(s)
Spreader beams type OX-SBIssued to
CARGOFLET BLASANT, S.L.
Sant Boi de Llobregat, Barcelona, Spainis 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 :****Offshore, platform and shipboard cranes**Issued at **Høvik** on **2020-11-23**This Certificate is valid until **2023-08-22**.
DNV GL local station: **Barcelona FIS**Approval Engineer: **Antonio Sendin Alvarez**for **DNV GL**
Digitally Signed By: Matteucci, Aldo
Location: DNV GL Høvik, Norway
Signing Date: 24.11.2020**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.



Job Id: **262.1-028237-3**
Certificate No: **TAS00001EK**
Revision No: **2**

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. The spreader beams are manufactured by the following companies:
 - Cargoflet Blasant S.L. (holder of the certificate)
Sant Boi de Llobregat, Barcelona (Spain)
 - Tremetal
Camí dels Sagraments, 15, Pol. Ind. Sant Ermengol II, 08630 Abrera, Barcelona (Spain)
 - Montajes Gomur
Polígono industrial de Cros, S, puerta 17, 39600 Maliaño, Cantabria (Spain)
2. 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
3. Welds and NDT to be carried out by certified personnel and in accordance to DNVGL-ST-0378 Sec.3
4. 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

Drawing No.	Rev.	Title	Status	Date
	22/03/2018	Table load vs span OX-SB (*)	For information	2018-08-23
OXSB009-001	00	Assembly	For information	2018-08-23
80220009 S	00	Sections	Type approved	2018-08-23
80220009 E	00	End unit	Type approved	2018-08-23
80220009 D	00	Descendent unit	Type approved	2018-08-23
017-001	00	OX SB 017- 001	For information	2018-08-23

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80220017 S	00	Sections	Type approved	2018-08-23
80220017 E	00	End unit	Type approved	2018-08-23
80220017 D	00	Descendent unit	Type approved	2018-08-23
024-001	00	Assembly	For information	2018-08-23
80220024 S	00	Sections	Type approved	2018-08-23
80220024 E	00	End unit	Type approved	2018-08-23
80220024 D	00	Descendent unit	Type approved	2018-08-23
OXS034-001	00	Assembly	For information	2018-08-23
80220034 S	00	Sections	Type approved	2018-08-23
80220034 E	00	End unit	For information	2018-08-23
80220034 D	00	Drop link	Type approved	2018-08-23
80220050 S	00	Sections	Type approved	2018-08-23
050-001	00	Assembly	For information	2018-08-23
80220050 E	00	End unit	Type approved	2018-08-23
80220050 D	00	Drop link	Type approved	2018-08-23
070-001-S	00	Assembly	For information	2018-08-23
80220070 S	00	Sections	Type approved	2018-08-23
80220070 E	00	End unit	Type approved	2018-08-23
80220070 D	00	Drop link	Type approved	2018-08-23
OXS0110-001	00	Assembly	For information	2018-08-23
80220110 S	00	Sections	Type approved	2018-08-23
80220110 E	00	End unit	Type approved	2018-08-23
80220110 D	00	Drop link	Type approved	2018-08-23
170-001	00	Assembly	For information	2018-08-23
80220170 S	00	Sections	Type approved	2018-08-23
80220170 E	00	End unit	Type approved	2018-08-23
80220170 D	00	Drop link	Type approved	2018-08-23
80220110 S	00	Sections	Type approved	2018-08-23
OXS0110-170-001	00	Assembly	For information	2018-08-23
8022110170 E	00	End unit	Type approved	2018-08-23
8022170250 E	00	End unit	Type approved	2018-08-23
80220170 S	00	Sections	Type approved	2018-08-23
170-250-001	00	Assembly	For information	2018-08-23
80220250 D	00	Drop link	Type approved	2018-08-23
250-001-V3	00	Assembly	For information	2018-08-23
80220250 S	00	Sections	Type approved	2018-08-23
80220250 E	00	End unit	Type approved	2018-08-23
80220250 S	00	Sections	Type approved	2018-08-23
250-400-001	00	Assembly	For information	2018-08-23
8022250400 E	00	End unit	Type approved	2018-08-23
80220400 D	00	Drop link	Type approved	2018-08-23
400-001	00	Assembly	For information	2018-08-23
80220400 S	00	Sections	Type approved	2018-08-23
80220400 E	00	End unit	Type approved	2018-08-23
400-600-001	00	Assembly	For information	2018-08-23
8022400600 E	00	End unit	Type approved	2018-08-23
80220600 D	00	Drop link	Type approved	2018-08-23
OXS0800-001	00	Assembly	For information	2018-08-23
80220800 S	00	Sections	Type approved	2018-08-23
80220800 E	00	End unit	Type approved	2018-08-23
80220800 D	00	Drop link	Type approved	2018-08-23
1350-001	00	Assembly	For information	2018-08-23
80221350 S	00	Sections	Type approved	2018-08-23
80221350 E	00	End unit	Type approved	2018-08-23
80221350 D	00	Drop link	Type approved	2018-08-23

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	00	Calculations OX-SB	For information	2018-08-23
	00	Weld details	For information	2018-08-23

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

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