

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Chain, shackles, swivels, sockets**with type designation(s)
DSR and DSS

Issued to

CODIPRO
Wiltz, Luxembourg

is found to comply with

DNV GL standard DNVGL-ST-0378 – Standard for offshore and platform 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 **2019-03-27**This Certificate is valid until **2024-03-26**.DNV GL local station: **Antwerp**for **DNV GL**Approval Engineer: **Antonio Sendin Alvarez**

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

Zinc-coated and painted lifting points with the following SWL:

- OS.DSR M10 UP / DSR M10 UP → SWL=0.7 tonnes
- OS.DSR M12 UP / DSR M12 UP → SWL=1.05 tonnes
- OS.DSR M16 UP / DSR M16 UP → SWL=2 tonnes
- OS.DSR M20 3t2 UP / DSR M20 3t2 UP → SWL=2.9 tonnes
- OS.DSR M24 UP / DSR M24 UP → SWL=4.4 tonnes
- OS.DSR M30 6t3 UP / DSR M30 6t3 UP → SWL=6 tonnes
- OS.DSR U 038 UP / DSR U 038 UP → SWL= 1300 lb
- OS.DSR U 050 UP / DSR U 050 UP → SWL=2400 lb
- OS.DSR U 058 UP / DSR U 058 UP → SWL=3900 lb
- OS.DSR U 075 UP / DSR U 075 UP → SWL=5250 lb
- OS.DSR U 100 UP / DSR U 100 UP → SWL=11200 lb
- OS.DSR U 125 UP / DSR U 125 UP → SWL=13500 lb
- OS.DSS M24 UP / DSS M24 UP → SWL=4.5 tonnes
- OS.DSS M30 UP / DSS M30 UP → SWL=7.7 tonnes
- OS.DSS M36 UP / DSS M36 UP → SWL=11 tonnes
- OS.DSS M42 UP / DSS M42 UP → SWL=13 tonnes
- OS.DSS U 100 UP / DSS U 100 UP → SWL=10000 lb
- OS.DSS U 125 UP / DSS U 125 UP → SWL=15000 lb
- OS.DSS U 150 UP / DSS U 150 UP → SWL=22000 lb
- OS.DSS U 175 UP / DSS U 175 UP → SWL=27000 lb

Categorization for zinc-coated lifting points: offshore

Categorization for painted lifting points: platform

Design temperature for zinc-coated lifting points = -20 °C

Design temperature for painted lifting points = 10 °C

Dynamic amplification factor (DAF) : 1.3

Application/Limitation

1. Line pull angle between 0 deg to 90 deg from vertical.
2. Installation to follow the manufacturer's procedures.
3. All materials are to be delivered with 3.1 certificates, documenting mechanical properties and chemical composition in accordance with the DNVGL-ST-0378 Sec. 3.4.3 and 3.5
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

Tests carried out

Prototype tests in accordance to EN 1677-1 Sec. 6.2 carried out on 2019-03-20 and witnessed by DNV GL Antwerp. In order to obtain a DNV GL product certificate, each lifting point shall be tested in accordance to EN 1677-1 Sec. 6.4.

Marking of product

Each lifting point is to be marked according to DNVGL-ST-0378 Sec.14.5.

Periodical assessment



Job Id: **262.1-029161-1**
Certificate No: **TAS00001ZG**

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