

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Slim Kenter Shackles**

with type designation(s)
ASAC201503-06Z01
ASAC201503-06Z02

Issued to

Jiangsu Asian Star Anchor Chain Co., Ltd.
JINGJIANG, JIANGSU, China

is found to comply with

DNVGL-OS-E302 – Offshore mooring chain, Edition July 2018**Application :****To be used for Temporary and Mobile Mooring**
as defined in DNVGL-OS-E301, Position Mooring, July 2018Issued at **Høvik** on **2018-09-12**This Certificate is valid until **2023-09-11**.for **DNV GL**DNV GL local station: **Jiangyin**Approval Engineer: **Pierre-Eric Moulia**

Inger-Helene Hals
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: **262.1-019336-1**
Certificate No: **TAS00001MX**

This certificate replaces S-8620 (5 year renewal and extension down to size Ø 40 mm).

Product description

Non-standard Kenter Shackles: They are slimmer than the ISO 1704 Standard Kenters.
This approval covers 43 sizes between 40 mm and 152 mm in R4 grade, and 30 sizes between 40 mm and 107 mm in R5 grade.

Application/Limitation

The approval is conditional that the manufacturer is approved by DNVGL for R4 and R5 grade material and size.

The shackles are to be used in connection with chains for Temporary and Mobile as defined in Offshore Standard DNVGL-OS-E301 "Position Mooring" July 2018.

The shackles shall be manufactured and tested in accordance with Offshore Standard DNVGL-OS-E302 "Offshore Mooring Chain" July 2018.

Individual Product Certificate is to be issued for each delivery.

Type Approval documentation

Tests carried out

Fatigue tests were performed on three 76mm slim kenters with DNVGL Surveyor.
For every order testing shall be carried out according to DNVGL-OS-E302 July 2018.

Marking of product

Each shackle shall be marked according to Offshore Standard DNVGL-OS-E302 "Mooring Chain" July 2018 Ch2 Sec2 §1.4 & §3.9.

Periodical assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 years and another one after 3,5 years (+/- 90 days), to verify that the type approval is complied with.