

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Nut and Spacer for D-Shackle

with type designation(s)
"Nut CEST-Solution"

Issued to

Fask-Tools AS
Ørsta, Norway

is found to comply with
DNV-OS-E301 – Position mooring, Edition July 2021

Application :

To be used for Temporary, Mobile and Long Term Mooring
as defined in DNV-OS-E301, Position Mooring, July 2021

Issued at **Høvik** on **2022-03-08**

This Certificate is valid until **2027-03-07**.

DNV local station: **Mid-North Norway CMC**

Approval Engineer: **Pierre-Eric Moulia**

for **DNV**



Digitally Signed By: Hals,
Inger-Helene
Signing Date: 08.03.2022

Location: **Høvik, Norway**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Nut and Spacer for D-Shackle. In 2 sizes: for Ø80mm and Ø160mm shackle bolt.

Application/Limitation

This nut design can be used (retrofit) for the shackles connecting fibre ropes, to prevent mechanical damage to the ropes for example when spooling onto drum.

Fask-Tools AS is the holder of the type approval. Manufacturing is subcontracted to : Hovdenakk Maskinering AS, Åmdalen 417, 6156 Ørsta, Norway

Type Approval documentation

Drawing No.	Rev	Document Title	Date
NU250/82/160	-	Nut 250x82/M160	12.01.2022
SP250/40	-	Spacer 250x40	12.01.2022
NU130/80/80	-	Nut 130x80/M80	13.01.2022

Tests carried out

Prototype functional tests were carried during type approval.

Marking of product

Marking of product shall be according to DNV-CP-0338.

Periodical assessment

For retention of this Type Approval, a DNV surveyor shall perform a periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days). The objective of the periodical assessment is to verify that the conditions for the Type Approval have not been altered. (Ref DNV-CP-0338 Type approval scheme).

Validity of this certificate can be checked at <https://approvalfinder.dnv.com/>