

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001J0
Revision No:
1

This is to certify:

That

GN Rope Fittings - Grofsmederij Nieuwkoop B.V.
Transportweg 47, 2421 LT Nieuwkoop, Netherlands

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Products	Forgings for hull structures and equipment Forgings for shafting and machinery
Steel types	See page 2
Max. weight	See page 2
Delivery Condition	See page 2

Manufacturer approved by this certificate is accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Høvik** on **2020-08-17**

for **DNV GL**

This Certificate is valid until **2023-06-30**.

DNV GL local station: **Netherlands CMC**

Approval Engineer: **Dechun Lou**

Sondre Løken
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



Job Id: **263.11-010821-1**
Certificate No: **AMMM00001J0**
Revision No: **1**

Particulars of the approval

Forgings for hull structures and equipment:

Steel type	Grade	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	VL F400UW, VL F440UW, VL F480UW, VL F520UW, VL F560UW, VL F600UW	OD	2 500	N, NT or QT
Alloy	VL F550AW, VL F600AW, VL F650AW	OD	2 500	QT

Forgings for shafting and machinery:

Steel type	Grade	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	VL F400U, VL F440U, VL F480U, VL F520U, VL F560U, VL F600U, VL F640U, VL F680U, VL F720U, VL F760U	OD	2 500	N, NT or QT
Alloy	VL F600A, VL F700A, VL F800A, VL F900A, VL F1000A, VL F1100A	OD	2 500	QT

Remarks:

¹⁾ OD: Open die forging.

²⁾ N: Normalised; NT: Normalised and Tempered; QT: Quenched and tempered.