



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001KG
Revision No:
5

This is to certify:

That

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

is an approved manufacturer of
Chain Cables

in accordance with

DNV-OS-E302 – Offshore mooring chain, Edition July 2022
DNV class programme – DNV-CP-0237 Offshore mooring chain and accessories

and the following particulars:

Product	Forged chain cable accessories
Grade	R3, R3S, R4
Heat treatment condition	See page 2
Max. diameter/thickness	230 mm
Remarks	See particulars of the approval

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

Issued at **Hamburg** on **2023-05-26**

This Certificate is valid until **2026-06-30**.

for **DNV**

DNV local unit: **Netherlands FIS**

Approval Engineer: **Dechun Lou**

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Thorsten Lohmann
Head of Section

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Form code: AM 311

Revision: 2022-12

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Particulars of the approval

Forged chain cable accessories			
Grade ¹⁾	Delivery conditions ²⁾	Max. diameter or thickness [mm]	Material manufacturer ^{3), 4)}
R3, R3S R4	QT	120	Sidenor Aceros especiales, S.L, Reinosa plant
			LIBERTY SPECIALITY STEELS (UK)
R3, R3S R4	NQT	230	Sidenor Aceros especiales, S.L, Reinosa plant
			LIBERTY SPECIALITY STEELS (UK)

Remarks:

¹⁾ For approved material specification see table S1

³⁾ QT: Quenched and tempered; NQT: Normalized, Quenched and Tempered.

³⁾ The approval is limited to the listed raw material manufacturer which is holding a valid AoM certificate.

⁴⁾ Forgings are carried out at GN Rope Fittings.

Miscellaneous:

1) Approval of procedures detailed in the approval letter: M-WW-VMC/MVH/261.0 General-J-1639.