

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001AT
Revision No:
2

This is to certify:

That

**Hönnetaler Kettenfabrik Schulte & Co.
Bundesstraße 30, 59846 Sundern-Hövel,
Germany**

is an approved manufacturer of
Chain Cables

in accordance with
DNV GL rules for classification – Ships
DNV GL rules for classification – Naval vessels

and the following particulars:

Product Grade(s)	Anchor Chain Cables and Accessories VL K1, VL K2 and VL K3, See page 2
Max. diameter	See page 2
Heat treatment condition	See page 2
Additional approval conditions	Including material grades according to international standards, Including Chains and Accessories according DIN 5683-1 and DIN 5683-2, See page 2

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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2020-09-10**

for **DNV GL**

This Certificate is valid until **2023-04-30**.

DNV GL local station: **Essen**

Approval Engineer: **Enno Brück**

Thorsten Lohmann
Head of Section

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Job Id: **263.11-010672-1**
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Particulars of the approval

Anchor Chain Cables and Accessories:

Grade	Product ¹⁾	Heat treatment condition ²⁾	Diameter [mm], max.	
VL K1	CC	N, AR	45	
	A		67	
VL K2	CC	N, QT	45	
	A		67	
VL K3	CC	QT	45	
	A		67	
1.3964 acc. BWB WL 1.3964-2 ³⁾	CC	acc. standard	45	
	A		67	
1.3952 acc. BWB WL 1.3952-3 ³⁾	CC		45	
	A		67	
1.4301 acc. EN 10088-3 ³⁾	CC		45	
	A		67	
1.4401 acc. EN 10088-3 ³⁾	CC		45	
	A		67	
1.4571 acc. EN 10088-3 ³⁾	CC		45	
	A		67	
Chains acc. DIN 5683-1 ³⁾	CC		acc. standard	39
Chain accessories acc. DIN 5683-2 ³⁾	A		acc. standard	39

Remarks:

- 1) CC: chain cables
A: accessories
- 2) N: Normalised
QT: Quenched and tempered
AR: As rolled
- 3) Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules