

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00001AT**  
Revision No:  
**1**

**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:

<b>Product Grade(s)</b>	<b>Anchor Chain Cables and Accessories VL-K1, VL-K2, VL-K3, see page 2</b>
<b>Delivery condition</b>	<b>See page 2</b>
<b>Max. diameter</b>	<b>Chain cables: 45 mm, Accessories: 67 mm, see page 2</b>
<b>Remarks</b>	<b>Including material grades according to international standards, Including Chains and Accessories according DIN 5683-1 and DIN 5683-2, see page 2</b>

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 **2019-08-16**

for **DNV GL**

This Certificate is valid until **2020-04-30**.

DNV GL local station: **Essen**

Approval Engineer: **Gordon Stieb**

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**Thorsten Lohmann**  
**Head of Section**



Job Id: **263.11-006890-1**  
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## Particulars of the approval

### Anchor Chain Cables and Accessories:

Grade	Product	Supply Condition <sup>1)</sup>	Diameter [mm], max.	
VL K1	Chain	N, AR	45	
	Accessories		67	
VL K2	Chain	N, QT	45	
	Accessories		67	
VL K3	Chain	QT	45	
	Accessories		67	
1.3964 acc. BWB WL 1.3964-2	Chain	SHT	45	
	Accessories		67	
1.3952 acc. BWB WL 1.3952-3 <sup>2)</sup>	Chain		45	
	Accessories		67	
1.4301 acc. EN 10088-3 <sup>2)</sup>	Chain		45	
	Accessories		67	
1.4401 acc. EN 10088-3 <sup>2)</sup>	Chain		45	
	Accessories		67	
1.4571 acc. EN 10088-3 <sup>2)</sup>	Chain		45	
	Accessories		67	
Chains acc. DIN 5683-1	Chain		(acc. standard)	39
Chain accessories acc. DIN 5683-2	Accessories		(acc. standard)	39

#### Remarks:

- 1) SHT: Solution Heat Treated (Solution Annealing)  
 N: Normalised  
 QT: Quenched and tempered  
 AR: As rolled
- 2) Possible application and certification of any material to classed object is subject to case by case approval