

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00001AC**  
Revision No:  
**1**

**This is to certify:**

**That**

**CEMTAS Celik Makina Sanayi Ve Ticaret A.S.**  
**Organize Sanayi Bölgesi A.O.S. Bulvari No: 3, 16140 Bursa,**  
**Turkey**

is an approved manufacturer of  
**Steelmaking and Rolled Steel Products**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Steelmaking (semi-finished bars)</b> <b>Bars for chain cables</b> <b>See page 2</b>
<b>Manufacturing method</b>	<b>Electric arc furnace,</b> <b>Continuous casting</b>
<b>Max. thickness / diameter</b>	<b>95 mm</b>
<b>Heat treatment condition</b>	<b>As rolled</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 **2020-05-13**

for **DNV GL**

This Certificate is valid until **2023-03-16**.

DNV GL local station: **Istanbul**

Approval Engineer: **Andreas Koch**

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

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Job Id: **263.11-010714-1**  
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## Particulars of the approval

### Semi-finished products

Grade	Product	Steel making <sup>1)</sup>	Fine grain treatment	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
<b>Steel acc. to EN 10025-2</b>					
S235JR, S235J0, S235J2, S275JR, S275J0, S275J2, S355JR, S355J0, S355J2	Bar	EAF, CC	Al, V	95	AR
<b>Steel bars acc. to EN ISO 683-1 <sup>3)</sup></b>					
C22E, C22R, C35, C35E, C35R, C40, C40E, C40R, C45, C45E, C45R	Bar	EAF, CC	Al	95	AR
<b>Steel bars acc. to EN ISO 683-2 <sup>3)</sup></b>					
42CrMo4, 30CrNiMo8, 34CrNiMo6	Bar	EAF, CC	Al	95	AR
<b>Steel bars acc. to EN ISO 683-3 <sup>3)</sup></b>					
16MnCr5, 16MnCrS5, 20MnCr5	Bar	EAF, CC	Al	95	AR

### Bars for chain cables

Steel type	Product	Steel making <sup>1)</sup>	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
VL K2	Bars for chain cable	EAF, CC	95	AR
VL K3	Bars for chain cable	EAF, CC	95	AR

Remarks:

- 1) EAF: electric arc furnace  
CC: continuous casting
- 2) AR: as rolled
- 3) Final products will in general be delivered in Q+T condition