

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

CEMTAS Celik Makina Sanayi Ve Ticaret A.S.
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:

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Hot rolled steel bars made of unalloyed steels for welded structures

Product: Steelmaking and hot rolled steel bars for anchor chain cables
Max. dia.: 95 mm
Details: 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.

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Issued at **Hamburg** on **2017-03-17**

for **DNV GL**

This Certificate is valid until **2020-03-16**.

DNV GL local station: **Istanbul**

Approval Engineer: **Eva Junghans**

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Thorsten Lohmann
Head of Section



Job Id: **263.11-007037-1**
 Certificate No: **AMMM00001AC**

Particulars of the approval

Grade	Product	Steelmaking, casting method	Delivery Condition	Thickness [mm], max.	Fine grain treatment
Steel acc. to EN 10025-2					
S235JR, S235J0, S235J2	ST	EAF, CC	AR	95	Al, V
S275JR, S275J0, S275J2	ST	EAF, CC	AR	95	Al, V
S355JR, S355J0, S355J2	ST	EAF, CC	AR	95	Al, V
Steel bars acc. to EN 10083-2					
C22E, C22R	ST	EAF, CC	AR**	95	Al
C35, C35E, C35R	ST	EAF, CC	AR**	95	Al
C40, C40E, C40R	ST	EAF, CC	AR**	95	Al
C45, C45E, C45R	ST	EAF, CC	AR**	95	Al
Steel bars acc. to EN 10083-3					
42CrMo4	ST	EAF, CC	AR**	95	Al
30CrNiMo8	ST	EAF, CC	AR**	95	Al
34CrNiMo6	ST	EAF, CC	AR**	95	Al
Steel bars acc. to EN 10084					
16MnCr5, 16MnCrS5	ST	EAF, CC	AR**	95	Al
20MnCr5	ST	EAF, CC	AR**	95	Al
Steel bars for chain cables					
S355J2 (VL K2)	ST	EAF, CC	AR**	95	Al
27MnSi5 (VL K3)	ST	EAF, CC	AR**	95	Al

ST: bars EAF: electric arc furnace CC: continuous casting ST: bars AR: as rolled

** Delivered by manufacturer as steel bar in as rolled condition; final products will in general be delivered in Q+T condition