

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM0000082 Revision No:

This is to certify:

That

Ozkan Demir Celik Sanayi A.S. Bozköy Mahallesi 13. Cadde No:4 35800 Aliaga-Izmir, Turkey

is an approved manufacturer of Steelmaking and Rolled Steel Products

in accordance with

Products

DNV rules for classification - Ships DNV-OS-B101 – Metallic materials DNV class programme – DNV-CP-0242 Semi-finished steel products DNV class programme - DNV-CP-0243 Rolled steel products - non stainless steel

and the following particulars:

Application area Steelmaking

> Normal strength steel High strength steel Bars for chain cables

IAYI A.S. Semi-finished products (billets, blooms),

Sections, Bars

Manufacturing method Electric arc furnace or basic oxygen converter,

continuous casting

See page 2 Max. thickness/diameter See page 2 Heat treatment condition

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 2023-03-01

This Certificate is valid until 2025-12-31.

DNV local unit: Istanbul

Approval Engineer: Stefan Röhr



#### for DNV

Digitally Signed By: Wildhagen, Christian Location: DNV Hamburg, Germany Signing Date: 01.03.2023, on behalf of

Thorsten Lohmann Head of Section

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Form code: AM 311 Revision: 2022-12 Page 1 of 2 www.dnv.com



Job Id: Certificate No: AMMM0000082

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Revision No:

## Particulars of the approval

#### Semi-finished products

Grade	Product	Steel making 1)	Fine grain treatment
NV A, NV B	Billet, Bloom	EAF, CC	-
NV A 27S, NV A32, NV A36, NV D 27S, NV D32, NV D36, NV E 27S, NV E32, NV E36, NV D40	Billet, Bloom		AI+V
NV K2, NV K3	Billet, Bloom		Al

#### Sections made from normal strength steel

Grade or type	Steel making 1)	Fine grain treatment	Heat treatment condition 2)	Max. thickness [mm]
NV A, NV B	EAF, CC	-	AR	25
NV E	EAF, CC	AI+V	TM	102

## Sections made from high strength steel

Grade or type	Steel making 1)	Fine grain treatment	Heat treatment condition 2)	Max. thickness [mm]
NV A27S, NV A32, NV A36 NV D27S, NV D32, NV D36	BOC or EAF,	AI+V	AR	25
NV E27S, NV E32, NV E36	BOC, CC	AI+V	NR	10
	EAF, CC		TM	28
NV D40	EAF, CC	AI+V	TM	45

# Sections made from steels acc. to other standards 3)

Grade	Steel making 1)	Fine grain elements	Heat treatment condition 2)	Max. thickness [mm]
Steel acc. to EN 10025-2				
S355JR, 355J0, S355J2, S355K2	BOC, CC	Acc. standard	AR, TM	25

## Round bars for chain cables

Grade	Steel making 1)	Fine grain treatment	Heat treatment condition 2)	Max. diameter (mm)
NV K2	EAF, VD, CC	AI	AR	100
NV K3				65

#### Remarks:

- BOC: Basic oxygen converter; EAF: Electric arc furnace; CC: Continuous casting
- AR: As rolled; NR: Normalizing rolling; TM: Thermo-mechanical rolling; N: Normalised
- Possible application and certification of any material to classed object is subject to case by case approval

Form code: AM 311 Revision: 2022-12 Page 2 of 2 www.dnv.com