

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:**

**That**

**Huta Bankowa Sp. z o.o.**  
**ul.Sobieskiego 24,**  
**41-300 Dąbrowa Górnicza,**  
**Poland**

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

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

and the following particulars:

<b>Application area</b>	<b>Normal strength steel</b>
	<b>High strength steel</b>
	<b>Bars for chain cables</b>
<b>Products</b>	<b>Sections,</b>
	<b>Bars,</b>
	<b>Semi-finished products for forging or rolling stock,</b>
	<b>see page 2</b>
<b>Manufacturing method</b>	<b>Basic oxygen converter,</b>
	<b>continuous casting or ingot casting</b>
<b>Max. thickness</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>See page 2</b>
<b>Additional approval conditions</b>	<b>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 **2018-08-20**

for **DNV GL**

This Certificate is valid until **2021-07-31**.

DNV GL local station: **Katowice**

Approval Engineer: **Enno Brück**

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



Job Id: **263.11-009098-1**  
 Certificate No: **AMMM000027K**

## Particulars of the approval

### Normal strength steel

Grade <sup>3)</sup>	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition <sup>2)</sup>
VL A	Bar	BOC, CC	Al	200	AR
VL A, VL B, VL D, VL E	Bar	BOC, CC or IC	Al	250	N
VL A	Sections	BOC, CC	Al	30	AR
VL B	Sections	BOC, CC	-	30	AR

### High strength steel

Grade <sup>3)</sup>	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition <sup>2)</sup>
VL A32, VL A36, VL D32, VL D36, VL E32, VL E36	Sections	BOC, CC	Al	20	AR
VL A32, VL A36	Bar	BOC, CC	Al	200	N
VL A32, VL A36	Bar	BOC, IC	Al	250	N

### Steels acc. other standards

Grade <sup>3)4)</sup>	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition <sup>2)</sup>
Steel acc. to EN 10025-2					
S235JR, S235J0, S235J2, S275JR, S275J0, S275J2, S355JR, S355J0, S355J2	Sections	BOC, CC	Acc. standard	20	Acc. standard
	Bar	BOC, CC or IC	Acc. standard	250	Acc. standard
Steel acc. to EN 10083-2					
C22E, C22R, C35, C35E, C35R, C40, C40E, C40R, C45, C45R, 28Mn6, 25CrMo4, 25CrMoS4, 34CrMo4, 34CrMoS4, 42CrMo4, 42CrMoS4, 30CrNiMo8, 34CrNiMo6	Bar	BOC, CC or IC	Acc. standard	250	N, QT
Steel acc. to EN 10084					
16MnCr5, 16MnCrS5, 18CrNiMo7-6, 20MnCr5, 20MnCrS5	Bar	BOC, CC or IC	Acc. standard	250	QT

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#### Bars for chain cables

Grade <sup>3)</sup>	Product	Steel making <sup>1)</sup>	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition <sup>2)</sup>
VL K1, VL K2	Bar	BOC, CC	Al	52	AR

#### Semi-finished products

Steel type <sup>3)</sup>	Product	Steel making <sup>1)</sup>	Max. Thickness [mm]	Delivery condition <sup>2)</sup>
C and C-Mn	Billet	BOC, CC or IC	250	AR
Alloy	Billet	BOC, CC or IC	250	AR

#### Remarks:

- 1) BOC: Basic oxygen converter  
CC: Continuous casting  
IC: Ingot casting
- 2) AR: as rolled  
N: normalised  
QT: quenched and tempered
- 3) Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules
- 4) Incl. equivalent grades in acc. to other standards