

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
VITKOVICE STEEL, a. s.
Ostrava, Czech Republic

is an approved manufacturer of
Rolled Steel Products

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Normal strength steel High strength steel Z-grade steels (plates with trough thickness properties)
Products	Plates
Max. thickness	See page 2
Heat treatment condition	See page 2
Additional approval conditions	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.

Issued at **Hamburg** on **2018-01-02**

for **DNV GL**

This Certificate is valid until **2021-01-31**.

DNV GL local station: **Prague**

Approval Engineer: **Stefan Röhr**

Thorsten Lohmann
Head of Section



Particulars of the approval

Steel Plates:

Normal Strength Steels:					
Grade or type	Steelmaking ¹⁾	Fine grain treatment	Delivery condition ²⁾	Max. Thick-ness (mm)	Z-quality
VL A	BOC, CC	Al	AR	40	-
	BOC, CC	Al+Nb	N	70	-
	BOC, IC	Al+Nb	N	100	-
VL B	BOC, CC	Al	AR	40	-
	BOC, CC	Al+Nb+V	N	70	-
	BOC, IC	Al+Nb+V	N	100	-
VL D	BOC, CC	Al	N	40	-
	BOC, CC	Al+Nb+V	N	70	-
	BOC, IC	Al+Nb+V	N	100	-
VL E	BOC, CC	Al+Nb	N	40	-
	BOC, CC	Al+Nb+V	N	70	-
	BOC, IC	Al+Nb+V	N	100	-
High Strength Steels:					
Grade or type	Steelmaking ¹⁾	Fine grain treatment	Delivery condition ²⁾	Max. Thick-ness (mm)	Z-quality
VL A32, VL A36	BOC, CC	Al	NR	40	Z35
	BOC, CC	Al+Nb+V	N	70	Z35
	BOC, IC	Al+Nb+V	N	100	Z35
VL D32, VL D36	BOC, CC	Al	N	40	Z35
	BOC, CC	Al+Nb+V	N	70	Z35
	BOC, IC	Al+Nb+V	N	100	Z35
VL E32, VL E36	BOC, CC	Al+Nb	N	40	Z35
	BOC, CC	Al+Nb+V	N	70	Z35
	BOC, IC	Al+Nb+V	N	100	Z35

Remarks:

¹⁾ BOC: Basic Oxygen Converter; CC: Continuous Casting; IC: Ingot Casting.

²⁾ AR: As Rolled; NR: Normalising Rolling; N: Normalised.