

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000XX
Revision No:
1

This is to certify:

That
INDUSTEEL BELGIUM SA
66, rue de Chatelet, 6030 Charleroi,
Belgium

is an approved manufacturer of
Rolled Steel Products

in accordance with
DNV GL rules for classification – Ships
DNV GL offshore standards

and the following particulars:

Application area	High strength steel Extra high strength steel Z-grade steels (plates with trough thickness properties) Stainless steel
Product	Plates
Manufacturing method	Electric ARC furnace, Continuous casting
Max. thickness/diameter	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 **2017-12-21**

for **DNV GL**

This Certificate is valid until **2020-12-31**.

DNV GL local station: **Antwerp**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-008324-1**
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Particulars of the approval

High strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
VL A40	Plate	EAF, CC	Al, Al+V	N	10	-
VL D40, VL E40	Plate	EAF, CC	Al+Nb, Al+V	N	40	-
VL D40, VL E40	Plate	EAF, CC	Al+Nb, Al+V	QT	40	-

Extra high strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
VL EO500, VL FO550	Plate	EAF, CC	Al+V	QT	100	Z25
VL FO690	Plate	EAF, CC	Al	QT	100	Z25

Stainless steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
VL 304 L, VL 316 L, VL 316 L N, VL 317 L	Plate	EAF, CC	acc. to standard	SHT	30	-
VL 304 L N	Plate	EAF, CC	acc. to standard	SHT	56	-
UNS S31803	Plate	EAF, CC	acc. to standard	SHT	45	-
1.4462 acc. EN 10088-2	Plate	EAF, CC	acc. to standard	SHT	45	-

Remarks:

- ¹⁾ BOC: Basic oxygen converter
EAF: Electric arc furnace
- ²⁾ N: normalised
QT: quenched and tempered
SHT: solution heat treated (solution annealed)
- ³⁾ Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules