

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

Liberty Steel Dalzell Ltd
Park Street, ML1 1PU, Motherwell,
United Kingdomis an approved manufacturer of
Rolled Steel Productsin accordance with
DNV GL rules for classification – Ships
DNVGL-OS-B101 – Metallic materials

and the following particulars:

Application area	Normal strength steel, High strength steel
Products	Plates See page 2
Manufacturing method	Basic oxygen converter, Continuous casting Ingot casting See page 2
Max. thickness	See page 2
Heat treatment condition	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 **2020-02-24**This Certificate is valid until **2023-03-07**.DNV GL local station: **Glasgow**Approval Engineer: **Enno Brück**for **DNV GL**

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Thorsten Lohmann
Head of Section

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Job Id: **263.11-010654-1**
 Certificate No: **AMMM000018V**
 Revision No: **1**

Particulars of the approval

Normal strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness [mm]	Heat treatment condition ²⁾
VL A	Plate	BOC, CC	Al	50	AR
VL A, VL B, VL D	Plate	BOC, CC	Al	100	N

High strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness [mm]	Heat treatment condition ²⁾
VL A32, VL A36 VL D32, VL D36	Plate	BOC, CC	Al+NB	75	N
		BOS, CC or IC	Ni+Nb	65	N
				40	NR
		BOC, CC	Al+NB	50	NR
			Al+Nb+Ti	50	TM
VL E32, VL E36	Plate	BOC, CC	Al+Nb+Ti	50	TM
		BOC, CC or IC	Al+Nb	65	N

Remarks:

- 1) BOC: Basic oxygen converter
 CC: Continuous casting
 IC: Ingot casting
- 2) AR: as rolled
 NR: normalising rolling
 TM: thermo-mechanical rolling
 N: normalised