

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

Liberty Merchant Bar Plc
Liberty House, Scunthorpe, DN16 1XL,
United Kingdom

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	Normal strength steel
Product	High strength steel
Manufacturing method	Structural sections,
Max. thickness / diameter	Bars
Heat treatment condition	Basic oxygen converter or Electric ARC furnace,
Additional approval conditions	Continuous casting
	See page 2
	As rolled
	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 **2017-12-14**

for **DNV GL**

This Certificate is valid until **2020-11-30**.

DNV GL local station: **Manchester**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Particulars of the approval

Normal strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
VL A	Section	BOC or EAF, CC	-	50	AR	-
	Section	BOC or EAF, CC	Al	50	AR	-
	Bar	BOC or EAF, CC	Al	50	AR	-
	Bar	BOC or EAF, CC	-	50	AR	-

High strength steel

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
VL A32, VL A36, VL D32, VL D36	Section	BOC or EAF, CC	Al+V	50	AR	-
	Bar	BOC or EAF, CC	Al+V	50	AR	-

Steels acc. other standards³⁾⁴⁾

Grade	Product	Steel making ¹⁾	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality
Steel acc. to EN 10025-2						
S235JR, S275J0, S275J2, S275JR, S355J0, S355J2, S355JR	Section	BOC or EAF, CC	Acc. standard	12	Acc. standard	-
S235JR, S275J0, S275J2, S275JR, S355J0, S355J2, S355JR	Bar	BOC or EAF, CC	Acc. standard	50	Acc. standard	-

Remarks:

- 1) BOC: Basic oxygen converter
EAF: Electric arc furnace
CC: Continuous casting
- 2) AR: as rolled
- 3) Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules
- 4) Possible application and certification of any material to classed object is subject to case by case approval