

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:**That****Duferco Danish Steel A/S
Havnevej 47, DK-3300 FREDERIKSVÆRK, Denmark**is an approved manufacturer of
Rolled Steel Productsin accordance with
**DNV GL rules for classification – Ships
Offshore Standard DNVGL-OS-B101**

and the following particulars:

Product	Sections and bars
Grades	See page 2
Steelmaking	Electric arc furnace, Continuous casting
Deoxidation	Killed
Fine grain elements	See page 2
Delivery conditions	As-Rolled
Max. thickness	See page 2

Manufacturer approved by this certificate is 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 **Høvik** on **2017-06-21**for **DNV GL**This Certificate is valid until **2020-04-30**.DNV GL local station: **Copenhagen**Approval Engineer: **Shylate Mahachi**

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Hanne Anita Hjerpetjønn
Head of Section



Job Id: **263.11-000531-3**
Certificate No: **AMMM00001EX**

Particulars of the approval

Grade	Steelmaking ¹⁾	Delivery condition ²⁾	Fine grain elements	Max. thickness [mm]
Sections				
VL A	EAF, CC	AR	-	10
VL A32, VL A36, VL D32, VL D36	EAF, CC	AR	Al+V	10
S235J0, S235J2, S235JR, S275J0, S275J2, S275JR, S355J0, S355J2, S355JR, S355K2 according to EN 10025-2	EAF, CC	According to standard	According to standard	10
Bars				
VL A	EAF, CC	AR	-	40
VL A32, VL A36	EAF, CC	AR	Al+V	35
VL D32, VL D36	EAF, CC	AR	Al+V	25
VL D32, VL D36	EAF, CC	AR	V+Ti	25
S235J0, S235J2, S235JR, S275J0, S275J2, S275JR, S355J0, S355J2, S355JR, S355K2 according to EN 10025-2	EAF, CC	According to standard	According to standard	40

Remarks:

- 1) EAF: Electric arc furnace, CC: Continuous casting
- 2) AR: As-rolled