DNV-GL

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00008R** Revision No:

1

This is to certify:

That

ArcelorMittal Bremen GmbH

Bremen, Germany

is an approved manufacturer of Steelmaking and Rolled Steel Products

in accordance with **DNV GL rules for classification – Ships**

and the following particulars:

Application area Normal strength steel High strength steel

Product Strip

Manufacturing method Basic Oxygen Converter,
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 ${\bf Hamburg}\ \ {\bf on}\ {\bf 2018\text{-}07\text{-}11}$

for **DNV GL**

This Certificate is valid until **2021-06-30**. DNV GL local station: **Bremerhaven**

Approval Engineer: **Torben Schälicke**

Thorsten Lohmann Head of Section



Form code: AM 311 Revision: 2018-03 www.dnvgl.com Page 1 of

Job Id: **263.11-005465-2** Certificate No: **AMMM000008R**

Revision No: 1

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, VL B, VL D, VL E	Strip	СС	Al + Ti	20	CR	

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	Strip	СС	Al + Ti	20	CR	
VL A32, VL A36, VL D32, VL D36	Strip	СС	Al + Nb	20	TM	

Steels acc. to other standards

Grade	Product	Steel making 1)	Fine grain elements	Max. thickness / diameter [mm]	Delivery condition ²⁾	Z-quality	
Steel acc. to I	Steel acc. to EN 10025-2 3)						
\$235JR, \$235J0, \$235J2, \$275JR, \$275J0, \$275J2, \$355JR, \$355J0, \$355J2, \$355J2,	Strip	СС	Acc. to standard	20	Acc. to standard		

Remarks:

- 1) CC: Continuous casting
- 2) CR: controlled rolled; TM: thermo-mechanical rolling
- ³⁾ Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules

Form code: AM 311 Revision: 2018-03 www.dnvgl.com Page 2 of 2