

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000R2
Revision No:
1

This is to certify:

That
Aleris Casthouse Germany GmbH
Carl-Spaeter-Str. 10, 56070 Koblenz,
Germany

is an approved manufacturer of
Aluminium Alloy Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Products	Semi-finished products for rolling stock (ingots)
Alloy type	See page 2
Max. weight	Aluminium alloy,
Additional approval conditions	See page 2
	See page 2
	20 000 kg
	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 **2019-12-11**

for **DNV GL**

This Certificate is valid until **2022-06-30**.
DNV GL local station: **Essen**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-006277-2**
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Particulars of the approval

Semi-finished products:

Grade	Product	Supply Condition	Max. thickness [mm]	Max. weight [kg]
VL-5083 ¹⁾	Ingot	As cast	600	20 000
VL-5059 ¹⁾	Ingot	As cast	600	20 000
VL-5754 ¹⁾	Ingot	As cast	600	20 000
VL-5086 ¹⁾	Ingot	As cast	600	20 000
VL-5383 ¹⁾	Ingot	As cast	600	20 000

Remarks:

- ¹⁾ Aluminium grades cover the supply of semi-finished products for materials used for construction of vessels and their equipment. The final processing mill (Aleris Rolled Products Germany GmbH, Koblenz, Germany) is responsible for ordering semi-finished material which complies with their approved chemical composition and enables them to achieve the required mechanical properties.