DNV-GL

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM0001C6** Revision No:

1

This is to certify:

That

Gießerei Radeberg GmbH Heinrich-Gläser-Straße 1, 01454 Radeberg, Germany

is an approved manufacturer of **Iron Castings**

in accordance with

DNV GL rules for classification – Ships DNVGL-OS-B101 – Metallic materials

and the following particulars:

Iron type Grey cast iron, Nodular cast iron

Casting method Sand casting

Max. weight 800 kg
Max. wall thickness 200 mm
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 2020-04-15

for **DNV GL**

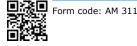
This Certificate is valid until **2023-05-31**.

DNV GL local station: Magdeburg

Approval Engineer: Christian Wildhagen

Thorsten Lohmann Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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Job Id: **263.11-004588-3** Certificate No: **AMMM00001C6**

Revision No: 1

Particulars of the approval

Cast iron

Iron type	Grade	Casting method	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Grey	EN-GJL-200 acc. EN 1561	- SC	800	200	-
	EN-GJL-250 acc. EN 1561				
Nodular	VL NCI-2	SC	800	200	F
	VL NCI 370	SC	800	200	-
	VL NCI 400	SC	800	200	-
	VL NCI 500	SC	800	200	-
	VL NCI 600	SC	800	200	-
	VL NCI 700	SC	800	200	-
	VL NCI 800	SC	800	200	-
	EN-GJS-400-18-LT acc. EN 1563	SC	800	200	F
	EN-GJS-400-18 acc. EN 1563	SC	800	200	-
	EN-GJS-400-15 acc. EN 1563	SC	800	200	-
	EN-GJS-450-10 acc. EN 1563	SC	800	200	-
	EN-GJS-500-7 acc. EN 1563	SC	800	200	-
	EN-GJS-600-3 acc. EN 1563	SC	800	200	-
	EN-GJS-700-2 acc. EN 1563	SC	800	200	-
	EN-GJS-800-2 acc. EN 1563	SC	800	200	-
	EN-GJS-SiMo40-10 acc. EN 16124 ³⁾	SC	800	200	F
	EN-GJS-SiMo50-10 acc. EN 16124 ³⁾	SC	800	200	F

Remarks:

- 1) SC: Sand Casting
- ²⁾ F: Ferritizing
- Possible application and certification of any material to classed object is subject to case by case approval

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