



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001BC
Revision No:
2

This is to certify:

That

Sachsen Guss GmbH
Obere Hauptstr. 228-230
09228 Chemnitz,
Germany

is an approved manufacturer of
Iron Castings

in accordance with
DNV rules for classification – Ships

and the following particulars:

Iron type	Grey cast iron, Nodular cast iron
Casting method	Sand casting
Max. weight	30 000 kg
Max. thickness	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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2022-09-05**

for **DNV**

This Certificate is valid until **2025-06-30**.

DNV local station: **Essen**

Approval Engineer: **Stefan Röhr**

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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Particulars of the approval

Cast iron

Iron type	Grade	Casting method ¹⁾	Max. weight [kg]	Max. thickness [mm]	Heat treatment condition ²⁾
Grey	150	SC	30 000	300	AC
	200	SC	30 000	300	AC
	250	SC	30 000	300	AC
	300	SC	30 000	300	AC
Nodular	NV NCI-1	SC	30 000	300	AC
	NV NCI-2	SC	30 000	300	F
	NV NCI370	SC	30 000	300	AC
	NV NCI400	SC	30 000	300	AC
	NV NCI500-7	SC	30 000	300	AC
	NV NCI600-3	SC	30 000	300	AC
	NV NCI700	SC	30 000	300	AC
	NV NCI800	SC	30 000	300	AC
	EN-GJS-400-18-LT acc. to EN 1563	SC	30 000	300	F
	EN-GJS-400-18-RT acc. to EN 1563	SC	30 000	300	F
	EN-GJS-400-15 acc. to EN 1563	SC	30 000	300	AC
	EN-GJS-450-10 acc. to EN 1563	SC	30 000	300	AC
	EN-GJS-500-7 acc. to EN 1563	SC	30 000	300	AC
	EN-GJS-600-3 acc. to EN 1563	SC	30 000	300	AC
EN-GJS-700-2 acc. to EN 1563	SC	30 000	300	AC	
EN-GJS-800-2 acc. to EN 1563	SC	30 000	300	AC	

Remarks:

- 1) SC: Sand Casting
- 2) AC: As cast
 F: Ferritizing
 SR: Stress relieving

Additional approval conditions

Subject to case-by-case approval, production welding permitted according following approved WPS:

- WF 1410013 HH Page 01 WPSnr. 7.624 artgleich 2, VP:02/2011 dd. 2011-12-15
- WF 1410013 HH Page 02 WPSnr. 7.624 artfremd 3, VP:05/2011 dd. 2011-12-15
- WF 1410013 HH Page 03 WPSnr. 7.624 artgleich 1, VP:01/2011 dd. 2011-12-15
- WF 1410013 HH Page 04 WPSnr. 7.624 artfremd 1, VP:03/2011 dd. 2011-12-15

Prior to welding DNV is to be informed about type and location of welding. The requirements as stated in DNV-RU-SHIP Pt.2 Ch.2 Section 9 shall be complied with