

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00000A5**  
Revision No:  
**1**

**This is to certify:**

That  
**Sperre Baltic SIA**  
**Bikernieku 18, Riga LV-1039,**  
**Latvia**

is an approved manufacturer of  
**Iron Castings**

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

and the following particulars:

<b>Iron type</b>	<b>Grey cast iron, Nodular cast iron</b>
<b>Casting method</b>	<b>Sand casting</b>
<b>Max. weight</b>	<b>150 kg</b>
<b>Max. wall thickness</b>	<b>100 mm</b>
<b>Heat treatment condition</b>	<b>As cast</b>
<b>Additional approval conditions</b>	<b>See page 2</b>

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 **2018-10-17**

for **DNV GL**

This Certificate is valid until **2021-12-31**.

DNV GL local station: **Riga**

Approval Engineer: **Christian Wildhagen**

**Thorsten Lohmann**  
**Head of Section**



Job Id: **263.11-002996-5**  
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## Particulars of the approval

### Cast iron

Iron type	Grade <sup>3)4)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition <sup>2)</sup>
Grey	150	SC	150	100	AC
	200	SC	150	100	AC
	250	SC	150	100	AC
	300	SC	150	100	AC
	Cast iron acc. EN 1561:				
	EN-GJL-150	SC	150	100	AC
	EN-GJL-200	SC	150	100	AC
	EN-GJL-250	SC	150	100	AC
	EN-GJL-300	SC	150	100	AC
Nodular	VL NCI-2	SC	150	100	AC
	VL NCI 400	SC	150	100	AC
	VL NCI 500	SC	150	100	AC
	VL NCI 600	SC	150	100	AC
	VL NCI 700	SC	150	100	AC
	Cast iron acc. EN 1563:				
	EN-GJS-400-18-LT	SC	150	100	AC
	EN-GJS-400-18	SC	150	100	AC
	EN-GJS-400-15	SC	150	100	AC
	EN-GJS-500-7	SC	150	100	AC
	EN-GJS-500-14	SC	150	100	AC
	EN-GJS-600-3	SC	150	100	AC
	EN-GJS-700-2	SC	150	100	AC

#### Remarks:

- 1) SC: Sand casting
- 2) AC: As cast
- 3) Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules
- 4) Incl. equivalent grades in acc. to other standards