DNV-GL

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00001W9** Revision No:

1

This is to certify:

That

Vítkovické slévárny spol. s r.o. Halasova 2904/1, 70300 Ostrava - Vitkovice, Czech Republic

is an approved manufacturer of

Iron Castings

in accordance with

DNV GL rules for classification - Ships

and the following particulars:

Iron type Grey cast iron,

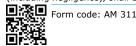
Nodular cast iron

Casting method See page 2
Max. weight 5 300 kg
Max. wall thickness See page 2
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 2020-12-10 | | | |
|---|-------------------|--|--|
| This Certificate is valid until 2023-12-31. | for DNV GL | | |
| DNV GL local station: Ostrava | | | |
| Approval Engineer: Andreas Koch | | | |
| | 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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263.11-008411-3 Certificate No: AMMM00001W9

Revision No:

Particulars of the approval

Cast iron

| Iron type | Grade ³⁾ | Casting method ¹⁾ | Max. weight [kg] | Max. section / wall thickness [mm] | Heat treatment condition ²⁾ |
|--------------|--|---------------------------------|------------------|--|--|
| Grey | EN-GJL-150 acc. EN 1561 ⁴⁾ | SC | 5 300 | 1 000 | AC |
| | EN-GJL-200 acc. EN 1561 | | | | |
| | EN-GJL-250 acc. EN 1561 | | | | |
| Nodular | VL NCI-1 | SC | 5 300 | 1 000 | F |
| | VL NCI-2 | SC | 5 300 | 1 000 | F |
| | VL NCI 370 | SC | 5 300 | 1 000 | AC |
| | VL NCI 400 | SC | 5 300 | 1 000 | AC |
| | VL NCI 500 | SC | 5 300 | 1 000 | AC |
| | VL NCI 600 | SC | 5 300 | 1 000 | AC |
| | VL NCI 700 | SC | 5 300 | 1 000 | AC |
| | VL NCI 800 | SC | 5 300 | 1 000 | AC |

Remarks:

- SC: Sand castingAC: As cast
- - F: Ferritizing
- 3) Incl. equivalent grades in acc. to other standards
- 4) Possible application and certification of any material to classed object is subject to case by case approval

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