

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM0000204 Revision No: 2

This is to certify:

That Vulkan Technologies Pvt. Limited Gat No 539-B, Kasar Amboli, Tal. Mulshi, Dist. Pune – 412 115 Maharashtra, India

is an approved manufacturer of **Iron Castings**

in accordance with DNV GL rules for classification – Ships

and the following particulars:

Iron type(s)	Nodular cast iron		
	Austenitic cast iron		
Max. weight	See page 2		
Max. wall thickness	200 mm		
Heat treatment condition	See page 2		
Remarks	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 2021-09-02

This Certificate is valid until **2024-08-31**. DNV local station: **Mumbai NB & CMC**

Approval Engineer: Andreas Koch

Thorsten Lohmann

for DNV

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 ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Nodular	VL NCI 400	sc	350	200	AC
	VL NCI 600				
	VL NCI 700				

Cast iron acc. to other standards

Iron type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Nodular	EN-GJS-400-15 acc. EN 1563 3)	SC	350	200	AC
	EN-GJS-450-10 acc. EN 1563 3)	SC	350	200	AC
	EN-GJS-600-3 acc. EN 1563 3)	SC	350	200	AC
	EN-GJS-700-2 acc. EN 1563 3)	SC	350	200	AC
Austenitic	EN-GJSA-XNi35 acc. EN 13835 ⁴⁾	SC	140	70	AC

Remarks:

¹⁾ SC: Sand casting

²⁾ AC: As cast

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