



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000F8
Revision No:
2

This is to certify:

That

Invac Cast Ltd.

**Block/Survey No: 444 to 453&455, Nana Fofadiya Road, Bamangam,
TA: Karjan, Vadodara - 391210, Gujarat,
India**

is an approved manufacturer of
Steel Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Castings for hull structures and equipment Castings for machinery Stainless steel castings
Steel type	Carbon and carbon-manganese, Austenitic stainless
Casting method	Investment casting
Max. weight	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 **2022-05-02**

for **DNV**

This Certificate is valid until **2025-03-15**.

DNV local station: **India CMC & NB**

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 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

Castings for hull structure and equipment

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	VL C400UW, VL C440UW, VL C480UW, VL C520UW, VL C560UW, VL C600UW	IC	100	150	N

Castings for machinery

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	VL C400U, VL C440U, VL C480U, VL C520U, VL C560U, VL C600U	IC	100	150	N

Stainless steel castings

Steel type	Casting method ¹⁾	Max. weight [kg]	Max. section / wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	IC	100	150	SHT

Remarks:

- 1) IC: Investment Casting
- 2) SHT: Solution Heat Treated (Solution Annealing)
N: Normalised
- 3) Incl. equivalent grades in acc. to other standards