



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001MJ
Revision No:
2

This is to certify:

That

Amex Alloys Private Ltd

**289/2, Sathy Road, Kunnathur Pudur Post, Coimbatore-641 107, Tamil Nadu,
India**

is an approved manufacturer of
Steel Castings

in accordance with

DNV rules for classification – Ships

DNV class programme – DNV-CP-0246 Steel castings

and the following particulars:

| | |
|---------------------------------|---|
| Application area | Castings for boilers, pressure vessels and piping systems, Stainless steel castings |
| Steel type | Carbon and carbon-manganese, Alloy, Austenitic stainless, Ferritic-austenitic (Duplex) stainless |
| Casting method | See page 2 |
| Max. weight | 1 100 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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2023-05-24**

for **DNV**

This Certificate is valid until **2026-06-30**.

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

Approval Engineer: **Andreas Koch**

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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.



Form code: AM 311

Revision: 2022-12

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Page 1 of 2

Particulars of the approval

Castings for boilers, pressure vessels and piping systems

| Steel type | Grade ³⁾ | Casting method ¹⁾ | Max. weight [kg] | Max. wall thickness [mm] | Heat treatment condition ²⁾ |
|------------|--|------------------------------|------------------|--------------------------|--|
| C and C-Mn | NV C450H, NV C490H | SC | 1 100 | 200 | N, NT, QT |
| Alloy | NV C0.5Mo, NV C1Cr0.5Mo, NV C2.25Cr1Mo | SC | 1 100 | 200 | QT |

Stainless steel castings

| Steel type | Grade ³⁾ | Casting method ¹⁾ | Max. weight [kg] | Max. wall thickness [mm] | Heat treatment condition ²⁾ |
|---------------------|---|------------------------------|------------------|--------------------------|--|
| Austenitic | GX 2 CrNi 18 10 (304L) GX 5 CrNi 19 9 (304) GX 6 CrNiNb 19 10 (347) GX 2 CrNiMo 19 11 2 (316L) GX 5 CrNiMo 19 11 2 (316) GX 5 CrNiMo 19 11 3 (317) | SC | 1 100 | 200 | SHT |
| Ferritic-austenitic | GX 2 CrNiMoN 22 5 3 | SC | 1 100 | 200 | SHT |

Remarks:

- ¹⁾ SC: Sand Casting
- ²⁾ SHT: Solution Heat Treated (Solution Annealing)
N: Normalized
QT: Quenched and tempered
NT: Normalized and tempered
- ³⁾ Incl. equivalent grades in acc. to other standards

Special conditions:

- Including austenitic stainless steel for low-temperature applications