



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000E3
Revision No:
3

This is to certify:

That

Dongying Giayoung Precision Metal Co., Ltd.
1049, Xiwu Road, Dongying District, Dongying, Shandong,
China

is an approved manufacturer of
Steel Castings

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0246 Steel castings

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	120 kg
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 **2024-06-05**

This Certificate is valid until **2027-06-30**.

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

Approval Engineer: **Andreas Koch**



for **DNV**

This document has been digitally signed and will
therefore not have handwritten signature
Christian Wildhagen

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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Particulars of the approval

Castings for hull structure and equipment

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
C and C-Mn	NV C400UW, NV C440UW, NV C480UW	IC	120	N, QT

Castings for machinery

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
C and C-Mn	NV C400U, NV C440U, NV C480U, NV C520U	IC	120	N, QT

Stainless steel castings

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Austenitic	GX 2 CrNi 18 10 (304L)	IC	120	SHT
	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)			

Remarks:

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

Special conditions:

Including austenitic stainless steel for approved low-temperature applications