

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00000E3**Revision No:

This is to certify:

That

Dongying Giayoung Precision Metal Co., Ltd. 1049, Tianshan Road, Shengli Industrial Park, Dongying, China

is an approved manufacturer of **Steel Castings**

in accordance with

DNV GL rules for classification – Ships

DNV GL offshore standards

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 Investment casting

Casting method Investment cas Max. weight 120 kg

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.

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Issued at Hamburg on 2021-05-06

Approval Engineer: Andreas Koch

for **DNV**

This Certificate is valid until **2024-06-30**. DNV local station: **Qingdao NB & CMC**

Thorsten Lohmann Head of Section

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Job ld: **263.11-005332-4** Certificate No: **AMMM00000E3**

Revision No: 2

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	VL C400UW, VL C440UW, VL 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	VL C400U, VL C440U, VL C480U, VL 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

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