

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM000028H**Revision No:

This is to certify:

That

Österby Gjuteri AB Martinvägen 8, 748 32 Österbybruk, Sweden

is an approved manufacturer of **Steel Castings**

in accordance with

DNV rules for classification - Ships

and the following particulars:

Application area Castings for hull structures and equipment

Castings for machinery Castings for propellers Stainless steel castings

Steel type(s) Carbon and carbon-manganese,

Alloy,

Martensitic stainless, Austenitic stainless,

Austenitic-ferritic (Duplex) stainless,

Casting method See page 2
Max. weight 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 2022-09-28

This Certificate is valid until 2024-06-29.

DNV local station: Sweden CMC

Approval Engineer: Christian Wildhagen

for **DNV**

Thorsten Lohmann
Head of Section

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Form code: AM 311 Revision: 2021-03 www.dnv.com Page 1 of 2



Job Id: **263.11-008953-2** Certificate No: **AMMM000028H**

Revision No: 1

Particulars of the approval

Castings for hull structure and equipment

Steel type	Grade ³⁾	Casting method 1)	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	NV C400UW, NV C440UW, NV C480UW	sc	7000	N, NT, QT
Alloy	NV C550AW, NV C620AW	SC	7000	QT

Castings for machinery

Steel type	Grade ³⁾	Casting method 1)	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	NV C400U, NV C440U, NV C480U, NV C520U	sc	7000	N, NT, QT
Alloy	NV C550A, NV C600A, NV C690A	SC	7000	QT

Stainless steel castings Castings for propellers

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	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	7000	SHT
22Cr Duplex	GX 2 CrNiMoN 22 5 3	- SC	7000	SHT
25Cr Duplex	GX 2 CrNiMoCuN 25 6 3 3			

Remarks:

1) SC: Sand Casting

2) SHT: Solution Heat Treated (Solution Annealing)

N: Normalised

QT: Quenched and tempered NT: Normalised and tempered

3) Incl. equivalent grades in acc. to other standards

Form code: AM 311 Revision: 2021-03 www.dnv.com Page 2 of 2