

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00001VM**  
Revision No:  
**1**

## This is to certify:

That

**CASTINOX, S.A.**

**Polígono Industrial de Saratxo S/N, 01470 Amurrio, Álava,  
Spain**

is an approved manufacturer of  
**Steel Castings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Stainless steel castings</b>
<b>Steel type(s)</b>	<b>Austenitic Stainless</b>
<b>Casting method</b>	<b>Sand casting</b>
<b>Max. weight</b>	<b>2800 kg</b>
<b>Max. wall thickness</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>See page 2</b>

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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2020-11-02**

for **DNV GL**

This Certificate is valid until **2023-12-31**.

DNV GL local station: **Area NB/CMC Iberia**

Approval Engineer: **Andreas Koch**

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**Thorsten Lohmann**  
**Head of Section**

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Job Id: **263.11-008384-2**  
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## Particulars of the approval

### Stainless steel castings

Steel type	Grade <sup>3)</sup>	Casting method <sup>1)</sup>	Max. weight [kg]	Max. wall thickness [mm]	Delivery condition <sup>2)</sup>
Austenitic	GX 2 CrNi 18 10 (304L)	SC	2 800	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) SC: Sand Casting
- 2) SHT: Solution Heat Treated (Solution Annealing)
- 3) Incl. equivalent grades in acc. to other standards