

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00005E** Revision No:

This is to certify:

That

AMPO S.C.

Idiazabal, Guipuzcoa, Spain

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 machinery

Castings for steel castings for low temperature service

Stainless Steel Castings

Steel type(s) Carbon and carbon-manganese

Austenitic stainless

Austenitic-ferritic (Duplex) stainless

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 2023-12-08

for DNV

This Certificate is valid until 2026-12-31.

DNV local unit: Area NB/CMC Iberia

Approval Engineer: Andreas Koch

Thorsten Lohmann

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Job Id: Certificate No: 263.11-008385-3 AMMM000005E

Revision No: 3

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, NV C520UW	SC	5 000	N

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	5 000	Ν

Stainless steel castings

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)	SC	5 000	SHT
Duplex	GX 5 CrNiMo 19 11 3 (317) GX 2 CrNiMoN 22 5 3 (22Cr)			

Steel castings acc. other standards

Steel type	Grade	Casting method 1)	Max. weight [kg]	Heat treatment condition ²⁾	
Steel acc. to EN 10293					
C and C-Mn	GE200, GE240, GE300	3 000	100	N	
Steel acc. to ASTM A351					
Austenitic	CF3M, CF8M	SC	5 000	SHT	

Remarks:

1) SC: Sand Casting

2) SHT: Solution Heat Treated (Solution Annealing) N: Normalized

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

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