



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000003G
Revision No:
2

This is to certify:

That

METALURGICA MADRILEÑA, S.A.

**Avenida de Madrid 62, 28802, Alcala de Henares, Madrid,
Spain**

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
Steel type	Carbon and carbon-manganese, Alloy,
Casting method	See page 2
Max. weight	See page 2
Max. wall thickness	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 **2022-07-21**

for **DNV**

This Certificate is valid until **2025-08-31**.

DNV local station: **Madrid**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section

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Particulars of the approval

Castings for hull structure and equipment

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	NV C400UW, NV C440UW, NV C480UW	SC	1 500	300	N, NT, QT
Alloy	NV C550AW, NV C620AW	SC	500	300	QT

Castings for machinery

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	NV C400U, NV C440U, NV C480U, NV C520U,	SC	1 500	300	N, NT, QT
Alloy	NV C550A, NV C600A, NV C690A	SC	500	300	QT

Remarks:

- 1) SC: Sand Casting
- 2) N: Normalized
 QT: Quenched and tempered
 NT: Normalized and tempered
- 3) Incl. equivalent grades in acc. to other standards