

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM000001C
Revision No:
5

This is to certify:

that

Acierie et Fonderie de la Haute Sambre SA
Rue du Pont des Moines, 59145 Berlaimont,
France

is an approved manufacturer of
Steel Castings

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0246 Steel castings

and the following particulars:

Application area	Castings for hull structures and equipment Castings for machinery Castings for boilers, pressure vessels and piping systems
Steel/Material type(s)	Stainless steel castings Carbon and carbon-manganese Alloy Nickel base alloy Austenitic stainless Austenitic-ferritic (Duplex) stainless
Casting method	Sand casting
Max. weight	See page 2 ff.
Heat treatment condition	See page 2 ff.

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 **2025-09-02**

for **DNV**

This Certificate is valid until **2028-06-30**.

DNV local unit: **France CMC**

Approval Engineer: **Christian Wildhagen**



This document has been digitally signed and will
therefore not have handwritten signature

Martin Wenning

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

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, NV C560UW, NV C600UW	SC	3 500	N, NT, QT
Alloy	NV C550AW, NV C620AW	SC	3 500	NT, 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, NV C560U, NV C600U	SC	3 500	N, NT, QT
Alloy	NV C550A, NV C600A, NV C690A	SC	3 500	NT, QT

Castings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	NV C450H, NV C490H	SC	3 500	N, NT, QT
Alloy	NV C0.5Mo, NV C1Cr0.5Mo, NV C2.25Cr1Mo	SC	3 500	N, NT, QT

Nickel base alloys

Steel type / grade	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
ASTM A494 CW6MC	SC	3 500	SHT

Stainless steel castings

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Austenitic	GX 2 CrNi 18 10 (304L)	SC	3 500	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)			
Austenitic-ferritic	GX 2 CrNiMoN 22 5 3	SC	3 500	SHT
	GX 2 CrNiMoCuN 25 6 3 3	SC	3 500	SHT
	GX 2 CrNiMoN 26 7 4	SC	3 500	SHT

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