

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000YZ
Revision No:
4

This is to certify:

That

Wolfensberger AG
Bäretswilerstrasse 45, CH-8494 Bauma,
Switzerland

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 hull structures and equipment, Castings for machinery, Castings for boilers, pressure vessels and piping systems, Stainless steel castings
Steel type	Carbon and carbon-manganese, Alloy, Austenitic stainless, Ferritic-austenitic (Duplex) stainless
Casting method	See page 2 ff.
Max. weight	See page 2 ff.
Max. wall thickness	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 **2025-04-25**

This Certificate is valid until **2028-02-28**.

DNV local unit: **Augsburg**

Approval Engineer: **Andreas Koch**



for **DNV**

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

Christian Wildhagen

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 300,000 USD.

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, NV C520UW, NV C560UW, NV C600UW	SC	1 000	200	N, NT, QT
Alloy	NV C550AW, NV C620AW	SC	1 000	200	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, NV C560U, NV C600U	SC	1 000	200	N, NT, QT
Alloy	NV C550A, NV C600A, NV C690A	SC	1 000	200	QT

Castings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	NV C450H, NV C490H	SC	1 000	200	N, NT, QT
Alloy	NV C0.5Mo, NV C1Cr0.5Mo, NV C2.25Cr1Mo	SC	1 000	200	QT

Stainless steel castings

Steel type / grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	SC	1 000	200	SHT
22 Cr Duplex	SC	1 000	200	SHT

Included steels according to other standards

Standard / grade	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Unalloyed and low-alloyed steels up to G26CrMo4 acc. to EN 10293	SC	1 000	200	N
GS17CrMoV5-10 acc. to EN 10213	SC	1 000	200	QT
GX5CrNiMoNb19-11-2 acc. to EN 10213	SC	1 000	200	SHT
GX2CrNiMoN25-6-3 acc. to EN 10283	SC	1 000	200	SHT
Gx4CrNi13-4 acc. to EN 102831 ⁴⁾	SC	1 000	200	QT
GX40CrNiSi 22-10 acc. to EN 10295 ⁴⁾	SC	1 000	200	AC
GNiCr22Mo9Nb acc. to manufacturer's spec. ⁴⁾	SC	400	200	SHT

Remarks:

- 1) SC: Sand Casting or Exacast® process
- 2) SHT: Solution Heat Treated (Solution Annealing)
 N: Normalized; NT: Normalized and tempered
 QT: Quenched and tempered
- 3) Incl. equivalent grades in acc. to other standards
- 4) Possible application and certification of any material to classed object is subject to case by case approval