



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000024J
Revision No:
3

This is to certify:

That

Officine Ambrogio Melesi & C. S.r.l.
Largo de Vecchi 11, 23813 Cortenova LC,
Italy

is an approved manufacturer of
Steel Forgings

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0247 Steel forgings

and the following particulars:

Application area	Forgings for hull structures and equipment Forgings for shafting and machinery Forgings for boilers, pressure vessels and piping systems Stainless steel forgings
Steel type(s)	Alloy, Austenitic stainless, 22Cr duplex stainless, 25Cr duplex stainless
Forging method	Open die forging
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 **2024-10-29**

This Certificate is valid until **2027-10-30**.

DNV local unit: **Italy/Malta CMC**

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

Forgings for hull structures and equipment

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Alloy	NV F550AW, NV F620AW, NV F650AW	OD	2 500	QT

Forgings for shafting and machinery

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Alloy	NV F600A, NV F700A, NV F800A, NV F900A, NV F1000A, NV F1100A	OD	2 500	QT

Forgings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Alloy	NV F0.5Mo	OD	2 500	NT, QT
	NV F1Cr0.5Mo	OD	2 500	NT, QT
	NV F2.25Cr1MoN	OD	2 500	N
	NV F2.25Cr1MoQT	OD	2 500	QT

Stainless steel forgings

Steel type / grade ^{3) 4)}	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Austenitic stainless	OD	2 500	SHT
22Cr duplex stainless	OD	1 500	SHT
25Cr duplex stainless	OD	1 500	SHT

Remarks:

- ¹⁾ OD: Open die forging
- ²⁾ N: Normalised
 NT: Normalised and tempered
 QT: Quenched and tempered
 SHT: Solution Heat Treated (Solution Annealing)
- ³⁾ Including equivalent grades to other standards
- ⁴⁾ Stainless steel forgings shall be in accordance with recognized standards, e.g. EN 10222, ASTM A473/A965/A1049 and JIS G 3214. Recognition of other standards is subject to submission to the Society for evaluation