



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM000030E
Revision No:
1

This is to certify:

that

Bertoloni & Botturi S.r.l.
Via Emblegna, 24/26, 25085, Gavardo (BS),
Italy

is an approved manufacturer of
Steel Forgings

in accordance with

DNV rules for classification – Ships
DNV class programme – DNV-CP-0247 Steel forgings

and the following particulars:

Application area	Forgings for shafting and machinery, Forgings for gearing, Forgings for boilers, pressure vessels and piping systems
Steel type	Alloy, See page 2
Forging method	Closed die forging, See page 2
Max. weight	See page 2
Max. diameter / section	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 **2025-11-03**

This Certificate is valid until **2028-11-28**.

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

Approval Engineer: **Andrzej Otrebski**



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 USD 300 000.

Particulars of the approval

Forgings for shafting and machinery

Forgings for gearing

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Max. diameter / section [mm]	Heat treatment condition ²⁾
Alloy	NV F600A, NV F700A, NV F800A, NV F900A, NV F1000A, NV F1100A	CD	150	800	QT

Forgings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Max. diameter / section [mm]	Heat treatment condition ²⁾
Alloy	NV F0.5Mo, NV F1Cr0.5Mo	CD	150	800	NT, QT
	NV F2.25Cr1Mo	CD	150	800	N, QT

Remarks:

- ¹⁾ CD: Closed die forging
- ²⁾ QT: Quenched and tempered
N: Normalised
NT: Normalised and tempered
- ³⁾ Incl. equivalent grades in acc. to other standards