APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000001S
Revision No:
3

This is to certify:

That

FORGE MONCHIERI S.p.A.

Via Industriale, 3, 25040, Cividate Camuno BS,
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 gearing** **Forgings for boilers, pressure vessels and piping systems** **Stainless steel forgings**
Steel type	**Carbon and carbon-manganese,** **Alloy,** **Austenitic stainless,** **See page 2**
Forging method	**Open die forging**
Max. weight	**40 000 kg**
Heat treatment condition	**See page 2**
Additional approval conditions	**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 **2025-06-12**

This Certificate is valid until **2028-06-30**.
DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Dechun Lou**

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]
C and C-Mn	NV F400UW, NV F440UW, NV F480UW, NV F520UW, NV F560UW, NV F600UW	OD	40 000	N, NT, QT
Alloy	NV F550AW, NV F600AW, NV F650AW	OD	40 000	QT

Forgings for shafting and machinery
Forgings for gearing

Steel type	Grade [3]	Forging method [1]	Max. weight [kg]	Heat treatment condition [2]
C and C-Mn	NV F400U, NV F440U, NV F480U, NV F520U, NV F560U, NV F600U, NV F640U, NV F680U, NV F720U, NV F760U	OD	40 000	N, NT, QT
Alloy	NV F600A, NV F700A, NV F800A, NV F900A, NV F1000A, NV F1100A	OD	40 000	QT

Forgings for boilers, pressure vessels and piping systems

Steel type	Grade [3]	Forging method [1]	Max. weight [kg]	Heat treatment condition [2]
C and C-Mn	NV F450H, NV F490H	OD	40 000	N, NT, QT
Alloy	NV F0.5Mo, NV F1Cr0.5Mo	OD	40 000	N, NT, QT
	NV F2.25Cr1Mo	OD	40 000	N, QT

Stainless steel forgings

Steel type / grade [4]	Forging method [1]	Max. weight [kg]	Heat treatment condition [2]
Austenitic stainless	OD	40 000	SHT

Remarks:

1) OD: Open die forging
2) QT: Quenched and tempered
   N: Normalized
   NT: Normalized and tempered
   SHT: Solution Heat Treated (Solution Annealing)
3) Incl. equivalent grades in acc. 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, provided that supplementary requirements contained herein are also met. Recognition of other standards is subject to submission to the Society for evaluation.