

## APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM0000GD**Revision No:

This is to certify:

That

Canavera & Audi S.p.A. Regione Malone, 6 10070 Corio TO, 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 gearing

Steel type Carbon and carbon-manganese,

Alloy

Forging method Open die forging Max. weight See page 2
Max. thickness 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 2024-11-20

This Certificate is valid until **2027-09-30**. DNV local unit: **Italy/Malta CMC** 

Approval Engineer: Stefan Röhr



for **DNV** 

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

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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.



Job Id: 263.11-002173-4 AMMM0000GD Certificate No:

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## Particulars of the approval

## Forgings for gearing

Grade <sup>2)</sup>	Forging method 1)	Max. weight [kg]	Max. thickness [mm]	Heat treatment condition 3)
Steels acc. to EN ISO 683-1, -2, -3 (former EN 10084)				
C10E, C10R, C15E, C15R, C16E, C16R, 17Cr3, 17Cr3S, 28Cr4, 28CrS4, 16MnCr5, 16MnCrS5, 20MnCr5, 20MnCrS5 and 42CrNo4	OD	200	400	acc. to standard
Steel acc. to customer spec.				
ZF1, ZF1A, ZF7B (20MnCr5 modified)	OD	200	400	acc. to standard

## Remarks:

- 1)
- OD: Open die forging For DNV plan or type approved applications Heat treatment at DNV approved heat treatment workshops only

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