

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00002FC
Revision No:
1

This is to certify:

That

OFAR S.p.A.
Cividale del Friuli Plant
Via dell'Artigianato, 57
33043 Cividale del Friuli, UD, Italy

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Forgings for hull structures and equipment
Steel type	Forgings for shafting and machinery
Forging method	Carbon and carbon-manganese,
Max. weight	Alloy
Heat treatment condition	Open die forging
Additional approval conditions	See page 2
	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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2019-10-30**

for **DNV GL**

This Certificate is valid until **2021-12-31**.

DNV GL local station: **Venice**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-004897-3**
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Particulars of the approval

Forgings for hull structures and equipment

Steel type	Grade ⁴⁾	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	VL F400UW, VL F440UW, VL F480UW, VL F520UW, VL F560UW, VL F600UW	OD	44 000	N, NT, QT
Alloy	VL F550AW, VL F600AW, VL F650AW	OD	20 000	QT

Forgings for shafting and machinery

Steel type	Grade ⁴⁾	Forging method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
C and C-Mn	VL F400U, VL F440U, VL F480U, VL F520U, VL F560U, VL F600U, VL F640U, VL F680U, VL F720U, VL F760U	OD	44 000	N, NT, QT
Alloy	VL F600A, VL F700A, VL F800A, VL F900A, VL F1000A, VL F1100A	OD	20 000	QT

Remarks:

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