



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM0000070**  
Revision No:  
**4**

This is to certify:

That

**Forja Neptun S.R.L.**  
**Str. Infratirii Nr. 295, 105200 Baicoi,**  
**Romania**

is an approved manufacturer of  
**Steel Forgings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Products</b>	<b>Forgings for hull structures and equipment</b> <b>Forgings for shafting and machinery</b> <b>Forgings for gearing</b> <b>Forgings for boilers, pressure Vessels and piping systems</b>
<b>Steel type</b>	<b>Stainless steel forgings</b> <b>Carbon and carbon-manganese</b> <b>Alloy</b> <b>Martensitic stainless</b>
<b>Forging method</b>	<b>Open die forging</b>
<b>Max. weight</b>	<b>1600 kg</b>
<b>Heat treatment condition</b>	<b>See page 2 ff</b>
<b>Additional approval conditions</b>	<b>See page 2 ff</b>

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 **2021-10-21**

This Certificate is valid until **2024-09-30**.

for **DNV**

DNV local station: **Bucharest**

Approval Engineer: **Andreas Koch**

.....  
**Thorsten Lohmann**  
**Head of Section**

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.



Form code: AM 311

Revision: 2021-03

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## Particulars of the approval

### Forgings for hull structures and equipment

Steel type	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	VL F400UW, VL F440UW, VL F480UW, VL F520UW, VL F560UW, VL F600UW	OD	1 600	500	N, NT, QT
Alloy	VL F550AW, VL F600AW, VL F650AW	OD	1 000	500	QT

### Forgings for shafting and machinery Forgings for gearing

Steel type	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
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	1 600	500	N, NT, QT
Alloy	VL F600A, VL F700A, VL F800A, VL F900A, VL F1000A, VL F1100A	OD	1 000	500	QT

### Forgings acc. other standards

Grade <sup>3)4)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. thickness [mm]	Heat treatment condition <sup>2)</sup>
Steel acc. to EN 10250-2				
S235JRG2, S235J2G3, S355J2G3	OD	1 600	500	N
C22, C25, C30, C35, C40, C45	OD	1 600	500	N, NT, QT
Steel acc. to EN 10250-3				
25CrMo4, 34CrMo4, 42CrMo4, 50CrMo4 <sup>4)</sup>	OD	1 000	500	QT
Steel acc. to EN 10250-4 and EN 10088-3				
X17CrNi16-2 (1.4057)	OD	1 000	160	QT
Steel acc. to EN 10222-4				
P355QH	OD	1 600	500	NT
Steel acc. EN 10083-3				
39NiCrMo3	OD	250	250	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
- 4) The use of alloyed steels with carbon contents of C > 0.45 % is in each case subject to special approval by DNV.