

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM0000070
Revision No:
3

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:

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

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 **2018-11-23**

for **DNV GL**

This Certificate is valid until **2021-09-30**.

DNV GL local station: **Bucharest**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-006520-2**
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Particulars of the approval

Forgings for hull structures and equipment

Steel type	Grade ³⁾⁴⁾	Forging method ¹⁾	Max. weight [kg]	Max. thickness [mm]	Delivery condition ²⁾
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 ³⁾⁴⁾	Forging method ¹⁾	Max. weight [kg]	Max. thickness [mm]	Delivery 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	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 ³⁾⁴⁾	Forging method ¹⁾	Max. weight [kg]	Max. thickness [mm]	Delivery condition ²⁾
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 ⁵⁾	OD	1 000	500	QT
Steel acc. to EN 10250-4 and EN 10088-3				
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:

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- 1) OD: Open die forging
- 2) QT: Quenched and tempered
N: Normalised
NT: Normalised and tempered
- 3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
- 4) Incl. equivalent grades in acc. to other standards
- 5) The use of alloyed steels with carbon contents of $C > 0.45 \%$ is in each case subject to special approval by DNV GL