

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000CC
Revision No:
1

This is to certify:

That

**Ural Stamping Plant, Chelyabinsk Branch
Chelyabinsk, Russian Federation**

is an approved manufacturer of
Steel Forgings

in accordance with
**DNV GL rules for classification – Ships
DNVGL-OS-B101 – Metallic materials**

and the following particulars:

Application area	Forgings for hull structures and equipment, Forgings for shafting and machinery, Forgings for gearing
Steel type	Carbon and carbon-manganese, Alloy
Forging method	Open die forging
Max. weight	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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2020-02-18**

for **DNV GL**

This Certificate is valid until **2022-12-31**.

DNV GL local station: **St. Petersburg**

Approval Engineer: **Stefan Röhr**

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Thorsten Lohmann
Head of Section

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Job Id: **263.11-010503-1**
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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	VL F400UW, VL F440UW, VL F480UW, VL F520UW, VL F560UW, VL F600UW	OD	20 000	N, NT, QT
Alloy	VL F550AW, VL F600AW, VL F650AW	OD	20 000	QT

Forgings for shafting and machinery

Forging for gearing

Steel type	Grade ³⁾	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	20 000	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) N: Normalised
NT: Normalised and tempered
QT: Quenched and tempered
- 3) Incl. equivalent grades in acc. to other standards