

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000S8
Revision No:
1

This is to certify:

That
Forgital Dembiermont S.A.S.
4, rue Jules Campagne F-59330 Haumont,
France

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships
DNV GL rules for classification – Naval vessels

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,
Max. diameter / section	see page 2
Heat treatment condition	Open die forging,
Additional approval conditions	ring rolling,
	see page 2
	45 000 kg
	See page 2
	Normalized, normalized and tempered, quenched and tempered,
	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 **2018-08-02**.

for **DNV GL**

This Certificate is valid until **2021-07-31**.

DNV GL local station: **Paris**

Approval Engineer: **Christian Wildhagen**

Thorsten Lohmann
Head of Section



Job Id: **263.11-009114-1**
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Particulars of the approval

Forgings for hull structures and equipment

Grade ³⁾⁵⁾	Forging method ¹⁾	Max. weight [kg]	Max. thickness [mm]	Max. Diameter [mm]	Delivery condition ²⁾
S235JRG2, S235J2G3, S355J2G3 acc. EN 10250-2	OD	45 000	400	-	N, NT
	RR	45 000	400	8 000	N, NT
VL-M550S	OD	45 000	400	-	QT
	RR	45 000	400	8 000	QT
HY-80 acc. to MIL-S-23009C	OD	45 000	400	-	QT
	RR	45 000	400	8 000	QT
15NiCrMo10-6 acc. BWB WL 1.6780-3	OD	45 000	4200	-	QT
	RR	45 000	400	8 000	QT

Remarks:

- 1) OD: Open die forging
RR: Ring Rolling
- 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