

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That
Officine Ambrogio Melesi C. S.r.l.
Cortenova LC, Italy

is an approved manufacturer of
Steel Forgings

in accordance with
DNV GL rules for classification – Ships
DNV GL offshore standards

and the following particulars:

Application area	Forgings for hull structures and equipment Forgings for shafting and machinery Forgings for boilers, pressure vessels and piping systems Stainless steel forgings
Steel type(s)	Alloy, Austenitic stainless, 22Cr duplex stainless, 25Cr duplex stainless
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 **2018-07-02**

for **DNV GL**

This Certificate is valid until **2021-06-30**.

DNV GL local station: **Milan**

Approval Engineer: **Stefan Röhr**

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Thorsten Lohmann
Head of Section



Particulars of the approval

Forgings for hull structures and equipment

Steel type	Grade ^{3) 5)}	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Alloy	VL F550AW, VL F620AW, VL F650AW	OD	2 500	QT

Forgings for shafting and machinery

Steel type	Grade ^{3) 5)}	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Alloy	VL F600A, VL F700A, VL F800A, VL F900A, VL F1000A, VL F1100A	OD	2 500	QT

Forgings for boilers, pressure vessels and piping systems

Steel type	Grade	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Alloy	VL F0.5Mo	OD	2 500	NT, QT
	VL F1Cr0.5Mo	OD	2 500	NT, QT
	VL F2.25Cr1MoN	OD	2 500	N
	VL F2.25Cr1MoQT	OD	2 500	QT

Job Id: **263.11-004587-2**
Certificate No: **AMMM000024J**

Stainless steel forgings

Steel type / grade ^{3) 4)}	Forging method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Austenitic stainless	OD	2 500	SHT
22Cr duplex stainless	OD	1 500	SHT
25Cr duplex stainless	OD	1 500	SHT

Remarks:

- 1) OD: Open die forging
- 2) QT: Quenched and tempered; SHT: Solution Heat Treated (Solution Annealing)
- 3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
- 4) Stainless steel forgings shall be in accordance with recognised standards, e.g. EN 10222, ASTM A473/A965/A1049 and JIS G 3214. Recognition of other standards is subject to submission to the Society for evaluation
- 5) Including equivalent grades to other standards