



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM0000230
Revision No:
1

This is to certify:

That

Feat Group S.p.A.-Divisione FEAT Industriale
Via Giuseppe Parini 30
23861 Cesana Brianza LC, Italy

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 boilers, pressure vessels and piping systems Stainless steel forgings
Steel type(s)	Carbon and carbon-manganese, Alloy, Austenitic stainless
Forging method	see page 2
Max. weight	200 kg
Max. diameter / section	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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2021-04-29**

for **DNV**

This Certificate is valid until **2024-06-29**.

DNV local station: **Italy**

Approval Engineer: **Torben Schälicke**

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.



Particulars of the approval

Forgings for hull structures and equipment

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Max. section [mm]	Heat treatment condition ²⁾
C and C-Mn	VL F400UW, VL F440UW, VL F480UW, VL F520UW, VL F560UW, VL F600UW	CD	200	100	N, NT, QT
Alloy	VL F550AW, VL F620AW, VL F650AW	CD	200	100	QT

Forgings for shafting and machinery

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Max. section [mm]	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	CD	200	100	N, NT, QT
Alloy	VL F600A, VL F700A, VL F800A, VL F900A, VL F1000A, VL F1100A	CD	200	100	QT

Forgings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Forging method ¹⁾	Max. weight [kg]	Max. section [mm]	Heat treatment condition ²⁾
Alloy	VL F0.5Mo	CD	200	100	QT
	VL F1Cr0.5Mo				
	VL F2.25Cr1Mo				

Stainless steel forgings

Steel type	Forging method ¹⁾	Max. weight [kg]	Max. section [mm]	Heat treatment condition ²⁾
Austenitic stainless	CD	200	100	SHT

Remarks:

- 1) CD: Closed die forging
- 2) QT: Quenched and tempered, N: Normalised, NT: Normalised and tempered, SHT: Solution Heat Treated (Solution Annealing)
- 3) Incl. equivalent grades in acc. to other standards