DNV·GL

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM000009F Revision No:

This is to certify:

F.A.I.L. SRL

Via Galileo Galilei, 18 - 42020 San Polo d'Enza, RE, Italy

is an approved manufacturer of **Steel Castings**

in accordance with

DNV GL rules for classification - Ships DNVGL-OS-B101 - Metallic materials

and the following particulars:

Application area

Castings for machinery,

Castings for boilers, pressure vessels and piping systems,

Stainless steel castings

Steel type

Carbon and carbon-manganese,

Austenitic stainless, **Martensitic stainless**

Casting method

Sand casting See page 2

Max. weight Max. wall thickness

Heat treatment condition

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 2021-01-13

This Certificate is valid until 2024-01-06.

DNV GL local station: Milan

Approval Engineer: Stefan Röhr

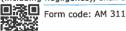


for DNV GL

Digitally Signed By: Wildhagen, Christian Location: DNV GL Hamburg, Germany Signing Date: 14.01.2021, on behalf of

Thorsten Lohmann Head of Section

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Revision: 2020-01

www.dnvgl.com

Page 1 of 2

Job Id:

263.11-004620-2

Certificate No: AMMM00009F

Revision No: 1

Particulars of the approval

Castings for machinery

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	VL C400U, VL C440U, VL C480U, VL C520U, VL C560U, VL C600U	SC	600	100	N, NT, QT

Castings for boilers, pressure vessels and piping systems

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
C and C-Mn	VL C450H, VL C490H	SC	600	100	N, NT, QT

Stainless steel castings

Steel type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	GX 2 CrNi 18 10 (304L) GX 5 CrNi 19 9 (304) GX 6 CrNiNb 19 10 (347) GX 2 CrNiMo 19 11 2 (316L) GX 5 CrNiMo 19 11 2 (316) GX 5 CrNiMo 19 11 3 (317)	sc	600	100	SHT
Martensitic		sc	600	100	QT

Remarks:

1) SC: Sand Castings

SHT: Solution Heat Treated (Solution Annealing); N: Normalized QT: Quenched and tempered; NT: Normalized and tempered

3) Incl. equivalent grades in acc. to other standards

Form code: AM 311 Revision: 2020-01 www.dnvgl.com Page 2 of 2