



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:  
**AMMM000030D**  
Revision No:  
**1**

## This is to certify:

that

**LOIRE INDUSTRIE**  
**ZI le Clos Marquet,**  
**42406 Saint-Chamond,**  
**France**

is an approved manufacturer of  
**Steel Forgings**

in accordance with

**DNV rules for classification – Ships**  
**DNV class programme – DNV-CP-0247 Steel forgings**

and the following particulars:

<b>Application area</b>	<b>Stainless steel forgings</b>
<b>Steel type</b>	<b>Austenitic stainless, See page 2</b>
<b>Forging method</b>	<b>Open die forging</b>
<b>Max. weight</b>	<b>See page 2</b>
<b>Max. diameter / section</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>Solution heat treated</b>

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 **2025-11-26**

This Certificate is valid until **2028-11-29**.

DNV local unit: **France CMC**

Approval Engineer: **Christian Wildhagen**



for **DNV**

This document has been digitally signed and will  
therefore not have handwritten signature

Stefan Röhr

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 USD 300 000.

## Particulars of the approval

### Stainless steel forgings

Steel type	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. diameter / section [mm] <sup>4)</sup>	Heat treatment condition <sup>2)</sup>
Austenitic	CrNi (304, 304L, 347)	OD	110	110	SHT

#### Remarks:

- <sup>1)</sup> OD: Open die forging
- <sup>2)</sup> SHT: Solution Heat Treated (Solution Annealing)
- <sup>3)</sup> Stainless steel forgings shall be in accordance with recognized standards, e.g. EN 10222, ASTM A473/A965/A1049 and JIS G 3214, provided that supplementary requirements contained herein are also met. Recognition of other standards is subject to submission to the Society for evaluation
- <sup>4)</sup> Relevant wall thickness