

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:**

**That**

**Hertecant Flanges N.V.**  
**Lossing 22, 2260 Heultje-Westerlo,**  
**Belgium**

is an approved manufacturer of  
**Steel Forgings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Application area</b>	<b>Stainless steel forgings</b>
<b>Steel type</b>	<b>Austenitic stainless, Ferritic-austenitic (duplex) stainless</b>
<b>Forging method</b>	<b>Closed 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>See page 2</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 GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2020-11-30**

for **DNV GL**

This Certificate is valid until **2023-11-29**.

DNV GL local station: **Belgium**

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

### Stainless steel forgings

Steel type <sup>4)</sup>	Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. diameter / section [mm]	Heat treatment condition <sup>2)</sup>
Austenitic	CrNiMo	CD	370	100	SHT
Ferritic-austenitic	22 Cr Duplex	CD	680	100	SHT
	25 Cr Duplex	CD	680	100	SHT

### Steels acc. other standards

Grade <sup>3)</sup>	Forging method <sup>1)</sup>	Max. weight [kg]	Max. diameter / section [mm]	Heat treatment condition <sup>2)</sup>
Steel acc. to EN 10222-5				
X1NiCrMoCu25-20-5 (1.4539)	CD	370	100	SHT
X2CrNiMoCuWN25-7-4 (1.4501)	CD	680	100	SHT
Steel acc. to ASTM A182				
F 904L (UNS N08904)	CD	370	100	SHT
F 55 (UNS S32760)	CD	680	100	SHT

#### Remarks:

- 1) CD: Closed die forging
- 2) SHT: Solution Heat Treated (Solution Annealing)
- 3) Incl. equivalent grades in acc. to other standards
- 4) 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.