



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM00000XU**  
Revision No:  
**5**

This is to certify:

That

**Outokumpu Stainless AB**  
**693 81 Degerfors,**  
**Sweden**

is an approved manufacturer of  
**Rolled Steel Products**

in accordance with

**DNV rules for classification – Ships**  
**DNV rules for classification – Naval vessels**

and the following particulars:

<b>Application area</b>	<b>Stainless steel,</b> <b>Non-magnetizable steels</b>
<b>Products</b>	<b>Plates</b>
<b>Manufacturing method</b>	<b>Hot Rolling</b>
<b>Max. thickness</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 **2022-02-03**

This Certificate is valid until **2025-01-31**.

DNV local station: **Sweden CMC**

Approval Engineer: **Andreas Koch**

for **DNV**

.....  
**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

### Stainless steel

Austenitic Stainless Steel				
Grade	Product	Steelmaking <sup>1) 4)</sup>	Max. Thickness (mm)	Heat treatment condition <sup>2)</sup>
NV 304 L	Plate	EAF, CC	55	SHT
NV 316 L			60	
NV 316 L N			55	
NV 317 L			55	
NV 321			55	
NV 347			55	

Duplex Stainless Steel				
Grade	Product	Steelmaking <sup>1) 4)</sup>	Max. Thickness (mm)	Heat treatment condition <sup>2)</sup>
UNS S31803	Plate	EAF, CC	55	SHT
UNS S32750			55	
UNS S32304 <sup>3)</sup>			55	
UNS S32101 <sup>3)</sup>				

Non-magnetizable steels				
Grade	Product	Steelmaking <sup>1) 4)</sup>	Max. Thickness (mm)	Heat treatment condition <sup>2)</sup>
1.3964 acc. to BWB WL 1.3964.1	Plate	EAF, CC	21	SHT
1.3964 acc. to BWB WL 1.3964.1		EAF, IC	55	SHT

#### Remarks:

- 1) EAF: Electric Arc Furnace; CC: Continuous Casting; IC: Ingot Casting
- 2) SHT: Solution heat treated
- 3) Application subject to special plan approval
- 4) DNV approved pre-material supplier for the relevant steel grades