

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:**

**That**

**Outokumpu Stainless AB**  
**DEGERFORS, Sweden**

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

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

and the following particulars:

<b>Application area</b>	<b>Stainless steel, Non-magnetizable steels</b>
<b>Product</b>	<b>Plates, see page 2</b>
<b>Manufacturing method</b>	<b>Hot Rolling</b>
<b>Delivery conditions</b>	<b>Solution heat treated</b>
<b>Max. thickness</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 **2019-04-23**

for **DNV GL**

This Certificate is valid until **2022-01-31**.

DNV GL local station: **Stockholm**

Approval Engineer: **Stefan Röhr**

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**Thorsten Lohmann**  
**Head of Section**



Job Id: **263.11-009565-1**  
 Certificate No: **AMMM00000XU**  
 Revision No: **4**

## Particulars of the approval

### Stainless steel

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

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

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

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. DNVGL approved pre-material supplier for the relevant steel grades