

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00001DW
Revision No:
1

This is to certify:

That
Outokumpu Stainless Oy
Terästie, 95490 Tornio,
Finland

is an approved manufacturer of
Steelmaking and Rolled Steel Products

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area Products	Stainless steel Plates and sheets, Coils, Strip, See page 2
Manufacturing method	Electric arc furnace, Argon oxygen decarburisation, Continuous casting
Max. thickness	See page 2
Heat treatment condition	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 **2019-06-20**

This Certificate is valid until **2022-06-30**.

DNV GL local station: **Helsinki**

Approval Engineer: **Enno Brück**



for **DNV GL**

Digitally Signed By: Wildhagen, Christian

Location: DNV GL Hamburg, Germany

Signing Date: 2019-06-21, on behalf of

Thorsten Lohmann
Head of Section



Job Id: **263.11-003457-3**
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Particulars of the approval

Plates, sheets and strips

Grade	Steelmaking ¹⁾	Delivery condition	Max. thickness [mm]
VL 304 L	EAF, AOD, CC	SHT	12.7
VL 316 L	EAF, AOD, CC	SHT	12.7
VL 321	EAF, AOD, CC	SHT	12.7

Grades according to international standards Hot and cold rolled coils

Grade	Standard	Steelmaking ¹⁾	Delivery condition ²⁾	Max. thickness [mm]
316Ti	ASTM A240/A240M, ASME SA-240/SA-240M	EAF, AOD, CC	SHT	8 (hot rolled), 6 (cold rolled)
1.4571	EN 10028-7	EAF, AOD, CC	SHT	8 (hot rolled), 6 (cold rolled)
UNS 31655	ASTM A240/A240M	EAF, AOD, CC	SHT	8 (hot rolled), 5 (cold rolled)
1.4420	EN 10028-7	EAF, AOD, CC	SHT	8 (hot rolled), 5 (cold rolled)

Remarks:

- 1) EAF: Electric arc furnace
AOD: Argon-oxygen decarburisation
CC: Continuous casting
- 2) SHT: solution heat treated (solution annealed)