

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000H6
Revision No:
1

This is to certify:

That

OSTP Finland Oy Ab
Jakobstad, Finland

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Product	Pipes
Application area	Austenitic and ferritic-austenitic steel pipes
Steel type(s)	Austenitic stainless, Ferritic-austenitic (Duplex) stainless, see page 2
Manufacturing method	Welding: Laser/GTAW/PAW
Max. outer diameter	See page 2
Max. wall thickness	See page 2
Heat treatment condition	See page 2
Additional approval conditions	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 **2019-02-18**

for **DNV GL**

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

DNV GL local station: **Turku**

Approval Engineer: **Stefan Röhr**

.....
Thorsten Lohmann
Head of Section



Job Id: **263.11-004207-3**
Certificate No: **AMMM00000H6**
Revision No: **1**

Particulars of the approval

Austenitic stainless steel pipes Ferritic-austenitic (Duplex) stainless steel pipes

Steel type /grade ^{3) 4)}	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic stainless	ERW	1200	8	SHT
Ferritic-austenitic (Duplex) stainless	ERW	1200	8	SHT

Remarks:

- 1) EFW: Electric Fusion Welded (Laser/GTAW/PAW)
- 2) SHT: Solution Heat Treated (solution annealing)
- 3) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
- 4) Suitable pipe grades shall be selected from the following recognized standards: ISO 9329 Part 4, ISO 9330 Part 6, EN 10216 Part 5, EN 10217 Part 7, ASTM A269, ASTM A312, ASTM A358, ASTM A789, ASTM A790, ASTM A928 and JIS G3459
- 5) Including grades 904L and LDX2101® according to Outokumpu Datasheet/Spec.

Additional approval conditions:

Including low temperature service;

Including automated non-destructive testing (ET) in place of hydraulic testing according to relevant piping standard, limited to outer diameter max. 1120 mm and wall thickness max. 6 mm