

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

Schoeller Werk GmbH & Co. KG
Hellenthal, Germany

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
Manufacturing method	TIG-welded
Max. outer diameter	60 mm
Max. wall thickness	2.5 mm
Heat treatment condition	Solution heat treated
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 **2019-02-14**

for **DNV GL**

This Certificate is valid until **2021-12-31**.

DNV GL local station: **Essen**

Approval Engineer: **Andreas Koch**

Thorsten Lohmann
Head of Section



Particulars of the approval

Austenitic steel pipes

Steel type	Grade ³⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
Austenitic	1.4301	EFW	60	2,5	SHT
	1.4306				
	1.4307				
	1.4401				
	1.4404				
	1.4435				
	1.4436				
	1.4541				
	1.4571				

Remarks:

- 1) EFW: electric fusion welded
- 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

Special conditions:

Including automatic UT / ET testing in lieu of hydraulic testing according to relevant standard
Including austenitic stainless steel grades for approved low-temperature applications