

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000NZ
Revision No:
1

This is to certify:

That
ESTA-Rohr GmbH
Erndtebrück, 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 and round hollow section
Application area	Pipes for pressure systems, Pipes for structural applications
Steel type(s)	Carbon and Carbon-Manganese
Manufacturing method	Longitudinal and transversal welding (Welding method: SAW, MAG, TIG, SMAW)
Max. outer diameter	See page 2
Max. wall 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 **2018-06-18**

for **DNV GL**

This Certificate is valid until **2020-06-30**.

DNV GL local station: **Essen**

Approval Engineer: **Stefan Röhr**

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Thorsten Lohmann
Head of Section



Job Id: **263.11-004094-3**
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Particulars of the approval

Pipes:

Grade ^{3) 4)}	Manufacturing method ¹⁾	Supply Condition ²⁾	Max. wall thickness [mm]	Max. Diameter [mm]
Pipes made from carbon and carbon-manganese steels	EFW	N	60	4000
Pipes according to EN 10028-3				
P275NH, P275NL1, P275NL2, P355N, P355NH, P355NL1, P355NL2, P460NH, P460NL1, P460NL2	EFW	N	60	4000
Round hollow sections according to EN 10025-2				
S235JR, S235J0, S235J2, S275JR, S275J0, S275J2, S355JR, S355J0, S355J2	EFW	N, AW	60	4000
Round hollow sections according to EN 10025-3				
S275N, S275NL, S355N, S355NL, S420N, S420NL, S460N, S460NL	EFW	N	60	4000

Remarks:

1. EFW: Electric fusion welded
2. N: Normalized; AW: As welded
3. Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
4. Possible application and certification of any material to classed object is subject to case by case approval