

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000021F

This is to certify:

That
S.C. UPRUC CTR SA FAGARAS
1 Negoiu Street, 505200 Fagaras, Romania

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Pipe Fittings (elbows, reducers, tees, caps)
Steel type	Carbon and Carbon-Manganese Alloy, Austenitic Stainless
Manufacturing method	See page 2
Dimension	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 **2018-04-23**

This Certificate is valid until **2021-04-22**.

DNV GL local station: **Bucharest**

Approval Engineer: **Andreas Koch**



for **DNV GL**
Digitally Signed By: Roehr, Stefan
Location: DNV GL Hamburg, Germany
Signing Date: 26.04.2018 , on behalf of

Thorsten Lohmann
Head of Section



Particulars of the approval

Piping fittings (elbows, reducers, tees, caps)

Steel type	Grade ^{1) 2)}	Manufacturing method ³⁾	Dimensions [mm]	Delivery condition ⁴⁾
C and C-Mn	P235GH, P265GH, 16Mo3 acc. to EN 10216-2 P355NL2 acc. to EN 10216-3	CFS HFS	5) 6)	N
Alloy	13CrMo4-5 acc. to EN 10216-3 and other grades alloyed with CrMo			N+T
Austenitic	X6CrNiTi18-10 acc. to EN 10216-5 and other stainless steel grade alloyed with CrNi			S+Q

Remarks:

1) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules

2) Incl. equivalent grades in acc. to other standards mentioned in applicable DNVGL Rules

3) CFS: cold formed seamless HFS: hot formed seamless

4) N: Normalized; N+T: Normalized and tempered; S+Q: Solution annealed+quenched

5) for grades:

elbows: Ø 20.1–610mm, wall thickness 2-35mm, weight max. 500kg

equal tees: Ø 21.3–610mm, wall thickness 2-35mm, weight max. 600kg

reducer tees: Ø 21.3/17.1–610/508mm, wall thickness 2-35mm, weight max. 600kg

6) for grades:

concentric reducers: Ø 21.3/17.1–610/508mm, wall thickness 2-35mm, weight max. 300kg

eccentric reducers: Ø 26.7/21.3–610/508mm, wall thickness 2-35mm, weight max. 300kg

caps: Ø 21.3–610mm, wall thickness 2-35mm, weight max. 300kg