

# APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

**ArcelorMittal Tubular Products Ostrava a.s.**  
**Vratimovská 689, 707 02 Ostrava - Kunčice,**  
**Czech Republic**

is an approved manufacturer of  
**Steel Pipes and Fittings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Product</b>	<b>Pipes</b>
<b>Application area</b>	<b>Pipes for pressure systems, Boiler and superheater tubes</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese, Alloy, See page 2</b>
<b>Manufacturing method</b>	<b>Seamless</b>
<b>Max. outer diameter</b>	<b>273 mm</b>
<b>Max. wall thickness</b>	<b>25 mm</b>
<b>Heat treatment condition</b>	<b>See page 2</b>
<b>Additional approval conditions</b>	<b>See page 2</b>

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 **2018-07-31**

for **DNV GL**

This Certificate is valid until **2021-06-30**.

DNV GL local station: **Prague**

Approval Engineer: **Christian Wildhagen**

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**Thorsten Lohmann**  
**Head of Section**



## Particulars of the approval

### Pipes for pressure systems

Steel type <sup>2)3)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Delivery condition
C and C-Mn	HFS	273	25	Acc. standard
Alloy <sup>5)</sup>	HFS	273	25	Acc. standard

### Boiler and superheater tubes

Steel type <sup>2)4)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Delivery condition
C and C-Mn	HFS	273	25	Acc. standard
Alloy	HFS	273	25	Acc. standard

#### Remarks:

- 1) HFS: hot finished seamless
- 2) Certification of any material applied to classed object shall fulfill the applicable material requirements in the DNV GL class rules
- 3) Suitable pipe grades shall be selected from the following recognised standards:  
ISO 9329 Parts 1 and 2, ISO 9330 Parts 1 and 2, EN 10216 Parts 1 to 3, EN 10217 Parts 1 to 3, EN 10305 Part 1 and 2, ASTM A53, ASTM A106, ASTM A135, ASTM A335, JIS G3454, JIS G3455, JIS G3456 and JIS G3458
- 4) Suitable pipe grades shall be selected from the following recognised standards:  
ISO 9329 Part 2, ISO 9330 Part 2, EN 10216 Part 2, EN 10217 Part 2, ASTM A178, ASTM A209, ASTM A210, ASTM A213, JIS G3461, JIS G3462 and JIS G3463
- 5) Including grade 34CrMo4 according to EN 10297