

# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000026N**  
Revision No:  
**6**

This is to certify:

That

**Liberty Ostrava a.s.**

**Tube Plant**

**Vratimovská 689, 707 02 Ostrava-Kunčice,  
Czech Republic**

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

in accordance with

**DNV rules for classification – Ships**

**DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings**

and the following particulars:

<b>Product</b>	<b>Pipes</b>
<b>Application area</b>	<b>Pipes for pressure systems, Boiler and superheater tubes, Pipes for structural application</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>20 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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at **Hamburg** on **2024-09-25**

This Certificate is valid until **2027-08-31**.

DNV local unit: **Prague CMC**

Approval Engineer: **Christian Wildhagen**



for DNV

This document has been digitally signed and will  
therefore not have handwritten signature

Stefan Röhr

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Particulars of the approval

### Pipes for pressure systems

Steel type <sup>2)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Delivery condition
C and C-Mn	HFS	273	20	Acc. standard
Alloy	HFS	273	20	Acc. standard

### Boiler and superheater tubes

Steel type <sup>3)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Delivery condition
C and C-Mn	HFS	273	20	Acc. standard
Alloy	HFS	273	20	Acc. standard

#### Remarks:

- 1) HFS: hot finished seamless
- 2) 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
- 3) 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

#### Special conditions:

- Including automatic eddy current testing in lieu of hydraulic testing according to relevant piping standard for tubes with the following dimensions:
  - Outer diameter 21.3 - 51.0 mm,
  - Wall thickness 2.3 - 5.0 mm
- Including seamless pipes for structural applications (hollow sections) in comparable steel grades according EN 10210 and equivalent standards