

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM0000148 Revision No: 3

This is to certify:

That TRINECKÉ ŽELEZÁRNY, a.s. Výstavní 1132, Ostrava - Vítkovice, Czech Republic

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

in accordance with DNV rules for classification – Ships DNV-OS-B101 – Metallic materials DNV class programme – DNV-CP-0252 Steel pipes and steel pipe fittings DNV class programme – DNV-CP-0347 Structural hollow sections

and the following particulars:

Product	Pipes
	Structural hollow sections
Application area	Pipes for pressure systems,
	Boiler and superheater tubes
Steel type	Carbon and carbon-manganese
Manufacturing method	Seamless
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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at Hamburg on 2024-04-10

This Certificate is valid until **2027-08-31**. DNV local unit: **Prague CMC**

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for DNV

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

Stefan Röhr

Approval Engineer: Christian Wildhagen

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

Job Id: Certificate No: Revision No:

Pipes for pressure systems

Steel type /grade 1)	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	Seamless	406.4	60	Acc. standard

Boiler and superheater tubes

Steel type /grade 2)	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	Seamless	406.4	60	Acc. standard

Hollow sections / structural steel pipes

Steel type /grade 3)	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
S355J2H acc. EN 10210-1	Seamless	406.4	60.3	Acc. standard

Remarks:

¹⁾ Pipes for pressure systems

Suitable pipe grades shall be selected from the following recognized 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 or JIS G3458

- ²⁾ Boiler and superheater tubes Suitable pipe grades shall be selected from the following recognized 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 or JIS G3463
- ³⁾ Possible application and certification of any material to classed object is subject to case by case approval