



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM0000052**  
Revision No:  
**2**

This is to certify:

That

**voestalpine Tubulars GmbH & Co. KG**  
**Alpinestraße 17, 8652 Kindberg-Aumühl,**  
**Austria**

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

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

and the following particulars:

<b>Product</b>	<b>Pipes</b>
<b>Application area</b>	<b>Pipes for pressure systems, Pipes for low-temperature service, Boiler and superheater tubes</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese</b>
<b>Manufacturing method</b>	<b>Seamless</b>
<b>Max. outer diameter</b>	<b>180 mm</b>
<b>Max. wall thickness</b>	<b>22 mm</b>
<b>Heat treatment condition</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 **2022-09-06**

for **DNV**

This Certificate is valid until **2025-06-30**.

DNV local station: **Augsburg**

Approval Engineer: **Stefan Röhr**

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

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.



Form code: AM 311

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## Particulars of the approval

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**Pipes for pressure systems**  
**Pipes for low-temperature service**  
**Boiler and superheater tubes**

Steel type / grade <sup>2) 3) 4)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	HFS	180	22	acc. standard

Remarks:

- 1) HFS: Hot finished seamless
- 2) 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
- 3) Pipes for low-temperature service  
 Suitable pipe grades shall be selected from the following recognized standards:  
 ISO 9329 Part 3, ISO 9330 Part 3, EN 10216 Part 4, EN 10217 Part 6, ASTM A333, ASTM A334 or JIS G3460
- 4) 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