

## APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: AMMM00001HV Revision No: 2

This is to certify:

## That Arvedi Tubi Acciaio S.p.A. Via Acquaviva, 3 Zona Porto Canale, 26100 Cremona, CR, Italy

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

and the following particulars:

Product	Pipes,
	Structural hollow sections
Application area	Pipes for pressure systems
	Structural hollow sections
Steel type	Carbon and carbon-manganese
Manufacturing method	Electric resistance welding
	Hot finished
	Cold finished
Max. outer diameter	See page 2
Max. wall thickness	See page 2
Heat treatment condition	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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at Hamburg on 2023-05-12

This Certificate is valid until **2026-05-31**. DNV local unit: **Italy/Malta CMC** 

Approval Engineer: Dechun Lou

for DNV

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.





Particulars of the approval

## Pipes for pressure systems Structural hollow sections

Steel type <sup>3) 4)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition <sup>2)</sup>
C and C-Mn	HF ERW	88,9	10	Acc. to standard
	CFR ERW	168,3		Ν

Remarks:

- <sup>1)</sup> HF ERW: hot finished electric resistance welded
  - CFR ERW: cold finished electric resistance welded
- <sup>2)</sup> N: Normalised
- <sup>3)</sup> Pipes for pressure systems
  Suitable pipe grades shall be selected from the following recognized standards:
  ISO 9330 Parts 1 and 2, EN 10217 Parts 1 to 3, EN 10305 Part 3, ASTM A53, ASTM A178, ASTM A214, ASTM A334, JIS G3454, JIS G3456 or JIS G3458
- <sup>4)</sup> Hollow sections for structural application Suitable hollow section grades shall be selected from the following recognised standards: ISO 10799 Part 1, ISO 12633 Part 1, EN 10219 Part 1, EN 10210 Part 1, ASTM A500, ASTM A501

Special conditions:

Including steel pipes for elevated temperature applications