



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM00002JJ
Revision No:
2

This is to certify:

that

I.R.C. S.p.A.

**Via E. Fermi n. 7, 29016 Cortemaggiore (PC),
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	Fittings
Application area	Piping fittings
Steel type	Carbon and carbon-manganese, Alloy
Manufacturing method	Seamless, hot formed
Max. out diameter	610 mm
Max. wall thickness	30 mm
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 **2025-07-07**

This Certificate is valid until **2028-07-15**.

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Dechun Lou**



for **DNV**

This document has been digitally signed and will
therefore not have handwritten signature
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 USD 300 000.

Particulars of the approval

Piping fittings (elbows, tees, reducers and caps)

Steel type ³⁾	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Delivery condition ²⁾
C and C-Mn	HFS	610	30	N, NT, QT
Alloy	HFS	610	30	N, NT, QT

Remarks:

¹⁾ HFS: hot finished seamless

²⁾ N: Normalized

NT: Normalized and tempered

QT: Quenched and tempered

³⁾ Piping fitting

Suitable pipe grades shall be selected from the following recognized standards:

EN 10253, ASTM A234, ASTM A420, ASTM A860, ASTM A960, ASTM A961, JIS B2312, JIS B2313 or JIS B2316.