



APPROVAL OF MANUFACTURER CERTIFICATE

Certificate no.:
AMMM00002K8
Revision No:
3

This is to certify:

that

TENARIS - Dalmine S.p.A.
Via Achille Grandi, 100, 20862, Arcore MB,
Italy

is an approved manufacturer of
Rolled Steel Products

in accordance with

DNV rules for classification – Ships
DNV-OS-B101 – Metallic materials
DNV class programme – DNV-CP-0243 Rolled steel products – non stainless steel

and the following particulars:

Application area	High strength steel
	Extra high strength steel
Products	Structural hollow sections (Structural seamless pipes)
Manufacturing method	Hot / cold rolling / heat treatment
Max. dimensions	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 **2025-09-08**

This Certificate is valid until **2028-07-31**.

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

Approval Engineer: **Stefan Röhr**



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

Seamless hollow sections intended for structural application:

Grade	Steel-making ¹⁾	Fine grain treatment	Manufacturing method ¹⁾	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition ²⁾
NV A32, NV A36, NV D32, NV D36	EAF, CC	Al+Nb	HFS, CFS	220 (406) ^A	50 (50) ^A	N
NV A420, NV AO420, NV A460, NV AO460, NV D420, NV DO420, NV D460, NV DO460, NV E420, NV EO420, NV E460, NV EO460	EAF, CC	Al+Nb	HFS, CFS	220 (457) ^A	40 (40) ^A	QT
NV A500, NV AO500 NV A550, NV AO550, NV D500, NV DO500, NV D550, NV DO550, NV E500, NV EO500, NV E550 NV EO550	EAF, CC	Al+Nb	HFS, CFS	220 (356) ^A	38 (38) ^A	QT
NV A620, NV AO620, NV A690, NV AO690, NV D620, NV DO620, NV D690, NV DO690, NV E620, NV EO620, NV E690 NV EO690	EAF, CC	Al+Nb	HFS, CFS	220 (457) ^A	40 (40) ^A	QT

Remarks:

- ¹⁾ EAF: Electric Arc Furnace; CC: Continuous Casting;
 HFS: Hot finished seamless; CFS: Cold finished seamless
²⁾ N: Normalising; QT: Quenching and Tempering

Additional approval conditions

Starting material (round bars/billets) supplied by TENARIS - Dalmine S.p.A., Dalmine Works;

A: Heat treatment of steel (seamless) hollow round sections manufactured by TENARIS - Dalmine S.p.A (Dalmine Works), including following NDEs and marking/packing with max. OD and WT (values in brackets) as per AMMM00000MT Rev. 5