



Declaration of Performance

(according to Regulation EU No 305/2011)

Unique ID code	Forcon® TT 460MH [Grade S460MH / 1.8849]
Harmonised standard	EN 10219-1:2006 - Cold formed welded structural hollow sections of non-alloy and fine grain steels - Part 1: Technical delivery conditions (issued on the Official Journal of the European Union on 01/02/2007)
Intended use	To be used in metal structures or in composite metal and concrete structures. This product is supplied with a specific inspection document 3.1 (according to EN 10204) that includes the full length non-destructive testing of the weld (as defined in table 2 of EN 10219-1). This product is suitable for being used as constituent product of a steel structure according to EN 1090. Table 1 of EN 1090-2:2018 requires a 3.1 inspection document for structural steel above S275.
Manufacturer	TATA STEEL NEDERLAND TUBES BV Registered in Netherlands No. 20022812 Registered office: Souvereinstraat 35, Oosterhout, 4903 RH, Netherlands Website: www.tatasteelnederland.com
System of AVCP	System of assessment and verification of constancy of performance of the product System 2+ (FPC Certificate No: 0343/CPR/RQA2007001/A)
Notified body	Notified body No. 0343 LRQA Nederland B.V. George Hintzenweg 77 3068 AX Rotterdam Netherlands

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Jacob Gerkema

Managing Director

Tata Steel Nederland Tubes B.V.
Souvereinstraat 35, Oosterhout, 4903 RH
Netherlands

Date 04/09/2025

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification
Yield strength	Nominal thickness (mm)	Values min (MPa)	EN 10219-1:2006
	≤ 16	460	
Tensile strength	Nominal thickness (mm)	Values (MPa)	EN 10219-1:2006
		min max	
Elongation	Nominal thickness (mm)	Values min (%)	EN 10219-1:2006
		long.	
Impact strength (longitudinal)	Grade MH	17 (15 where Table B.5, Note a applies)	EN 10219-1:2006
		Impact Value min. average (J) at Test Temp (°C)	
Weldability (CEV)	Nominal thickness (mm)	Values max (%)	EN 10219-1:2006
	≤ 16	0.46	
Durability	Nominal thickness (mm)	Composition (cast) (max. unless otherwise shown)	EN 10219-1:2006
		C 0.16 Si 0.60 Mn 1.70 P 0.035 S 0.030 Nb 0.050 V 0.12 Al 0.020 min. Ti 0.050 Ni 0.30 Mo 0.20 N 0.025	
		GF deoxidation (a)	
		Durability is also dependent on any method of protection subsequently applied and the type and thickness of the coating	
	Tolerances on dimensions and shape	Round, square and rectangular hollow sections	In accordance with EN 10219-2:2006

Notes: (a) GF – Fully killed fine grain steel containing nitrogen binding elements

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TATA STEEL NEDERLAND TUBES BV Registered in Netherlands No. 20022812 Registered office: Souvereinstraat 35, Oosterhout, 4903 RH, Netherlands
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EN 10219-1:2006
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Performance declared for the following essential characteristics:
Yield strength: 460 MPa
Tensile strength: 530 – 720 MPa
Elongation: 17% (15% where Table B.5.a applies)
Impact strength: 40J at - 20°C
Weldability (CEV): 0.46%
Durability: See Declaration of Performance
Tolerances on dimensions and shape: In accordance with EN 10219-2:2006
Dangerous Substances: No Performance Determined (NPD)



Declaration of Performance

(according to The Construction Products (Amendment etc.) (EU Exit) Regulations SI 2020-1359)

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Registered office: Souvereinstraat 35, Oosterhout, 4903 RH, Netherlands
Website: www.tatasteelnederland.com

System of AVCP System of assessment and verification of constancy of performance of the product System 2+ (FPC
Certificate No: 0038/CPR/RQA2007001/A)

Approved body Approved body No. 0038
LRQA Verification Ltd.
1 Trinity Park, Bickenhill Lane
Solihull, West Midlands
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B37 7ES
United Kingdom

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Dangerous Substances: No Performance Determined (NPD)