TATA STEEL

Declaration of Performance

(according to Regulation EU No 305/2011)

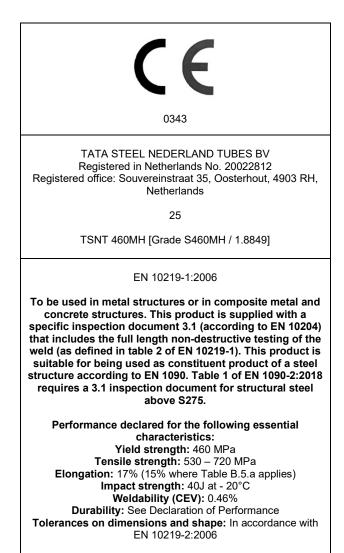
Unique ID code TSNT 460MH [Grade S460MH / 1.8849] Harmonised standard EN 10219-1:2006 - Cold formed welded structural hollow sections of non-allov and fine grain steels -Part 1: Technical delivery conditions (issued on the Official Journal of the European Union on 01/02/2007) Intended use To be used 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. TATA STEEL NEDERLAND TUBES BV Manufacturer Registered in Netherlands No. 20022812 Registered office: Souvereinstraat 35. Oosterhout. 4903 RH. Netherlands Website: www.tatasteeInederland.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 No. 0343 Notified body LRQA Nederland B.V. George Hintzenweg 77 3068 AX Rotterdam Netherlands

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



Date 09/01/2025

Table 1 - Essential characteristics and declared performances Harmonised Essential Performance technical characteristic specification Nominal Values thickness Yield strength min (MPa) (mm) 460 ≤ 16 Nominal Values (MPa) thickness Tensile strength max (mm) min 530 720 ≤ 16 Nominal Values min (%) thickness (mm) long. Elongation 17 ≤ 16 (15 where Table B.5. Note a applies) Nom. Impact Value Grade Thk min. average (J) at Test Temp (°C) Impact strength (mm (longitudinal) MH ≤ 16 40J at - 20°C EN 10219-1:2006 Nominal Values Weldability thickness max (%) (CEV) (mm) ≤ 16 0.46 Nominal Composition (cast) thickness (max. unless otherwise (mm) shown) С 0.16 Si 0.60 1.70 Mn Ρ 0.035 0.030 s 0.050 Nb 0.12 V Durability ≤ 16 AI 0.020 min. Ti 0.050 Ni 0.30 Мо 0.20 Ν 0.025 GF deoxidation (a) Durability is also dependent on any method of protection subsequently applied and the vpe and thickness of the coating Tolerances on Round, square In accordance with dimensions and and rectangular EN 10219-2:2006 shape hollow sections Notes: (a) GF – Fully killed fine grain steel containing nitrogen binding elements



Dangerous Substances: No Performance Determined (NPD)



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Declaration of Performance (according to The Construction Products (Amendment etc.) (EU

Exit) Regulations SI 2020-1359)								
	Unique ID code	TSNT 460MH [Grade S460MH / 1.8849]						
	Designated standard	EN 10219-1:2006 - Cold formed welded structura hollow sections of non-alloy and fine grain steels Part 1: Technical delivery conditions (issued on th 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: <u>www.tatasteelnederland.com</u>						
	System of AVCP	System of assessment and verification of constancy of performance of the product System 2+ (FPC Certificate No: 0038/CPR/RQA20070001/A)						
	Approved body	Approved body No. 0038 LRQA Verification Ltd. 1 Trinity Park, Bickenhill Lane Solihull, West Midlands Birmingham B37 7ES United Kingdom						

Essential characteristic	Essential characteristics and declared performance				Harmonised technical specification	
Yield strength	≤ (mm) ≤ 16 Nominal		Values min (MPa) 460 Values (MPa) min max			
Tensile strength						
Elongation	≤ 16 Nominal thickness (mm)		530 720 Values min (%) long.			
Liongation	≤ 16		17 (15 where Table B.5, Note a applies)			
Impact strength (longitudinal)	Grade	Nom. Thk. (mm)	Impact Value min. average (J) at Test Temp (°C)			
	МН	≤ 16	40J at - 20°C			
Weldability (CEV)			Values max (%)			EN 10219-1:200
	≤ 16		0.46			
	Nominal thickness (mm)		Composition (cast) (max. unless otherwise shown)			
Durability	≤ 16		C 0.16 Si 0.60 Mn 1.70 P 0.035 S 0.030 Nb 0.050 V 0.12 AI 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, s and recta hollow se	angular	In accordance with EN 10219-2:2006			

UK 0038 TATA STEEL NEDERLAND TUBES BV Registered in Netherlands No. 20022812 Registered office: Souvereinstraat 35, Oosterhout, 4903 RH, Netherlands 25 TSNT 460MH [Grade S460MH / 1.8849] EN 10219-1:2006 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. 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)

Jacob Gerkema Managing Director

Netherlands

Date 09/01/2025

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



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