TATA STEEL

Declaration of Performance

(according to Regulation EU No 305/2011)

Unique ID code TSNT 460MLH [Grade S460MLH / 1.8850]

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.tatasteeleurope.com

System of AVCP System of assessment and verification of constancy

of performance of the product System 2+ (FPC Certificate No: 2814/CPR/RQA2007001/A)

Notified body Notified body No. 0343

LRQA Nederland B.V. George Hintzenweg 77 3068 AX Rotterdam

Netherlands

DocuSigned by:

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

Date 01/04/2024



Essential characteristic		Pe	Harmonised technical specification		
Yield strength	Nominal thickness (mm)		Values min (MPa)		
	≤ 16		460		
Tensile strength	Nominal thickness		Values (MPa)		
	(mm)		min max		
	(IIIII) ≤ 16		530	720	
Elongation	Nominal		Valu		
	thickness		min (%)		Í
	(mm)		long.		
	≤ 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)		
	MLH	≤ 16	27J at - 50°C		
Weldability (CEV)	Nominal thickness (mm)		Values max (%)		EN 10219-1:2006
	≤ 16		0.46		
	Nominal		Composition (cast)		
	thickness (mm)		(max. unless otherwise shown)		
Durability	≤ 16 Durability is also of protection subs		C 0.1 Si 0.6 Mn 1.7 P 0.0 S 0.0 Nb 0.0 V 0.1 AI 0.0 Ni 0.3 Mo 0.2 N 0.0 GF deoxidati	6 0 0 330 25 50 2 20 min. 50 0 0 25 on (a)	
Tolerances on	type and thickness of the coating			ng	
dimensions and shape	Round, square and rectangular hollow sections In accorda				







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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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TSNT 460MLH [Grade S460MLH / 1.8850]

FN 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: 27J at - 50°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)

TATA STEEL

Declaration of Performance

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

Unique ID code TSNT 460MLH [Grade S460MLH / 1.8850]

Designated 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

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System of assessment and verification of constancy System of AVCP of performance of the product System 2+ (FPC

Certificate No: 0038/CPR/RQA20070001/A)

Approved body No. 0038 Approved body LRQA Verification Ltd.

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Birmingham B37 7ES United Kingdom

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Jacob Gerkema Date 01/04/2024

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



Essential characteristic		Pe	Harmonised technical specification			
Yield strength	Nominal thickness (mm)		Values min (MPa)			
	≤ 16		460			
Tensile strength	Nominal		Values			
	thickness		(MPa)			
	(mm) ≤ 16		min 530	max 720		
Elongation	≥ 16 Nominal		Valu			
	thickness		min (%)			
	(mm)		long.			
	≤ 16		17 (15 where Table B.5, Note a applies)			
		Nom.	Impact	Impact Value		
Impact strength (longitudinal)	Grade	Thk.	min. average (J)			
		(mm)	at Test Temp (°C)			
	MLH	≤ 16	27J at - 50°C			
Weldability (CEV)	Nominal thickness (mm)		Values max (%)		EN 10219-1:2006	
	≤ 16		0.46			
	Nominal		Composition (cast)			
	thickness		(max. unless otherwise shown)			
	(mm)		C 0.16			
			Si 0.6			
Durability	≤16		Mn 1.7	0		
			P 0.0			
			S 0.025 Nb 0.050			
			Nb 0.0 V 0.1			
				20 min.		
			Ti 0.0	50		
			Ni 0.3			
			Mo 0.2			
			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		Round, square In accordance with				
dimensions and	and recta		EN 10219			
shape	hollow sections					
L						







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Impact strength: 27J at - 50°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)