



### 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-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.tatasteelurope.com](http://www.tatasteelurope.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

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification	
	Nominal thickness (mm)	Values min (MPa)		
Yield strength	≤ 16	460	EN 10219-1:2006	
	Values (MPa)			
Tensile strength	Nominal thickness (mm)	min max		
	≤ 16	530 720		
Elongation	Nominal thickness (mm)	Values min (%) 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)
	MH	≤ 16		40J at - 20°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)		
		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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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)

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

Date 01/04/2024



### 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 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)

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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  
Solithull, West Midlands  
Birmingham  
B37 7ES  
United Kingdom

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification	
	Nominal thickness (mm)	Values min (MPa)		
Yield strength	≤ 16	460	EN 10219-1:2006	
	Tensile strength	Nominal thickness (mm)		Values (MPa)
min				max
Elongation	≤ 16	530		720
	Nominal thickness (mm)	Values min (%)		
≤ 16		long.		
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		GF deoxidation (a)		
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In accordance with EN 10219-2:2006				

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



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