

Declaration of Performance

(according to Regulation EU No 305/2011)

Unique ID code	TST Celsius355NH [Grade S355NH / 1.0539]
Harmonised standard	EN 10210-1:2006 - Hot finished 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 10210-1). 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 UK LIMITED Registered in England No. 2280000 Registered office: 18 Grosvenor Place, London, SW1X 7HS, UK Website : www.tatasteeleurope.com
Authorised representative	Simon Edwards – Technical Director (acting) Tata Steel Wenckebachstraat 1 Velsen Noord 1951 JZ NL PO Box 10.000 IJmuiden 1970 CA NL
System of AVCP	System of assessment and verification of constancy of performance of the product System 2+ (FPC Certificate No: 0343/CPR/LRQ0840080/A)
Notified body	Notified body No. 0343 LRQA Nederland B.V. George Hintzenweg 77 3068 AX Rotterdam The Netherlands



Richard Sidebottom
Director Mills, DSO & Technical

Date 01/04/2024

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification		
	Nominal thickness (mm)	Values Min (MPa)			
Yield strength	≤ 16	355	EN 10210-1:2006		
	> 16 ≤ 40	345			
	> 40 ≤ 65	335			
Tensile strength	Nominal thickness (mm)	Values (MPa)			
		≤ 65		min	max
Elongation	Nominal thickness (mm)	Values min (%)			
		≤ 65		22	
				20	
Impact strength (longitudinal)	Grade	Nom. Thk. (mm)		Impact Value min. average (J) at Test Temp (°C)	
	NH	≤ 65		40J at - 20°C	
Weldability (CEV)	Nominal thickness (mm)		Values max (%)		
	≤ 16		0.43		
	> 16 ≤ 65		0.45		
Durability	Nominal thickness (mm)		Composition (cast) (max. unless otherwise shown)		
	≤ 65		C 0.20		
			Si 0.14 – 0.25		
			Mn 0.90 – 1.65		
		P 0.035			
		S 0.030			
		Nb 0.050			
		V 0.12			
		Al 0.020 min.			
		Ti 0.03			
		Cr 0.30			
		Ni 0.50			
		Mo 0.10			
		Cu 0.35			
		N 0.020			
		GF deoxidation (a)			
The product is suitable for hot dip galvanizing according to EN ISO 1461:2009 and fulfils the conditions of Category B of EN ISO 14713-2:2020					
Tolerances on dimensions and shape	Round, square, rectangular and elliptical hollow sections	In accordance with EN 10210-2:2006			

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



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TATA STEEL UK LIMITED
Registered in England No. 2280000
Registered office: 18 Grosvenor Place, London, SW1X 7HS, UK

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TST Celsius355NH [Grade S355NH / 1.0539]

EN 10210-1:2006

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 10210-1). 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: 355 MPa (≤ 16 mm)

Tensile strength: 470 – 630 MPa

Elongation: 22%

Impact strength: 40J at - 20°C

Weldability (CEV): 0.43% (≤ 16 mm)

Durability: See Declaration of Performance

Tolerances on dimensions and shape: In accordance with EN 10210-2:2006

Dangerous Substances: No Performance Determined (NPD)

Declaration of Performance

(according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 No 1359)

Unique ID code	TST Celsius355NH [Grade S355NH / 1.0539]
Designated standard	EN 10210-1:2006 - Hot finished 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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Manufacturer	TATA STEEL UK LIMITED Registered in England No. 2280000 Registered office: 18 Grosvenor Place, London, SW1X 7HS, UK Website : www.tatasteelurope.com
System of AVCP	System of assessment and verification of constancy of performance of the product System 2+ (FPC Certificate No: 0038/CPR/LRQ0840080/A)
Approved body	Approved body No. 0038 LRQA Verification Limited 1 Trinity Park, Bickenhill Birmingham, B37 7ES UK

Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification	
	Nominal thickness (mm)	Values Min (MPa)		
Yield strength	≤ 16	355	EN 10210-1:2006	
	> 16 ≤ 40	345		
	> 40 ≤ 65	335		
Tensile strength	Nominal thickness (mm)	Values (MPa)		
		min		max
	≤ 65	470		630
Elongation	Nominal thickness (mm)	Values min (%)		
		longitudinal		22
	transverse	20		
Impact strength (longitudinal)	Grade	Nom. Thk. (mm)		Impact Value min. average (J) at Test Temp (°C)
	NH	≤ 65	40J at - 20°C	
Weldability (CEV)	Nominal thickness (mm)	Values max (%)		
		≤ 16	0.43	
		> 16 ≤ 65	0.45	
Durability	Nominal thickness (mm)	Composition (cast) (max. unless otherwise shown)		
		C	0.20	
		Si	0.14 – 0.25	
		Mn	0.90 – 1.65	
		P	0.035	
S	0.030			
		Nb	0.050	
		V	0.12	
		Al	0.020 min.	
		Ti	0.03	
		Cr	0.30	
		Ni	0.50	
		Mo	0.10	
		Cu	0.35	
		N	0.020	
		GF deoxidation (a)		
	The product is suitable for hot dip galvanizing according to EN ISO 1461:2009 and fulfils the conditions of Category B of EN ISO 14713-2:2020			
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EN 10210-1:2006

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