

Declaration of Performance (according to Regulation EU No 305/2011)

Unique ID code TST Celsius355NLH [Grade S355NLH / 1.0549]

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 01/10/22/2007)

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

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Ulmuiden
1970 CA NL

System of AVCP System of assessment and verification of constancy of performance of the product
System 2+ (FPC Certificate No: 2814)CPR/LRQ0840080/A)

Notified body Notified body No. 2814
Lloyd's Register Verification B.V.
K.P. van der Mandelelaan 41A
Rotterdam
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John Collingham
Director, Operations, Tubes
Souvereinsstraat 35, Oosterhout, 4903 RH
Netherlands

Date 12/07/2021



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	≤ 65	min 470 max 630	EN 10210-1:2006	
	Nominal thickness (mm)	Values (MPa)		
Elongation	≤ 65	Values min (%)	EN 10210-1:2006	
	longitudinal	22		
Impact strength (longitudinal)	Grade	Nom. TTK (mm)	EN 10210-1:2006	
	NLH	≤ 65		
Weldability (CEV)	Nominal thickness (mm)	Values max (%)	EN 10210-1:2006	
	> 16 ≤ 65	0.43		
Durability	≤ 65	Composition (cast) (max. unless otherwise shown)	EN 10210-1:2006	
		Si		0.20
		Mn		0.14 – 0.25
		P		0.90 – 1.65
		S		0.035
		Nb		0.030
		V		0.050
		Al		0.12
		Ti		0.020 min.
		Cr		0.03
GF deoxidation (a)	≤ 65	Cr	0.30	
		Ni	0.50	
		Mo	0.10	
		Cu	0.35	
Tolerances on dimensions and shape	Round, square, rectangular and elliptical hollow sections	In accordance with EN 10210-2:2006	EN 10210-2:2006	
		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		

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

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EN 10210-1:2006

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Performance declared for the following essential characteristics:

Yield strength: 355 MPa (≤ 16 mm)

Tensile strength: 470 – 630 MPa

Elongation: 22%

Impact strength: 27J at - 50°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 2019 No 465)

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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/CPRL/RQ0840080/A)

Approved body Approved body No. 0038
Lloyds Register Verification Ltd
71 Fenchurch Street, London
EC3M 4BS

John Collingham
Director Operations, Tubes
Souvereinstraat 35, Oosterhout, 4903 RH
Netherlands

Date 20/09/2021



Table 1 – Essential characteristics and declared performances

Essential characteristic	Performance		Harmonised technical specification	
	Values	Values		
Yield strength	Nominal thickness (mm)	Min (MPa)	EN 10210-1:2006	
	≤ 16	355		
	> 16 ≤ 40	345		
Tensile strength	Nominal thickness (mm)	Values (MPa)	EN 10210-1:2006	
	≤ 65	min 470 max 630		
	> 40 ≤ 65	335		
Elongation	Nominal thickness (mm)	Values (min (%))	EN 10210-1:2006	
		22		
Impact strength (longitudinal)	Grade	Impact Value (min, average (J) at Test Temp. (°C))	EN 10210-1:2006	
		20		
Weldability (CEV)	Nominal thickness (mm)	Values (max (%))	EN 10210-1:2006	
		0.43		
Durability	Nominal thickness (mm)	Composition (cast) (max, unless otherwise shown)	EN 10210-1:2006	
		C		0.20
		Si		0.14 – 0.25
		Mn		0.30 – 1.65
		P		0.035
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Tolerances on dimensions and shape	Round, square, rectangular and elliptical hollow sections	In accordance with EN 10210-2:2006	EN 10210-1:2006	
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