

## 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: 30 Millbank, London, SW1P 4WY, UK  
Website: [www.tatasteeleurope.com](http://www.tatasteeleurope.com)

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System of AVCP: System of assessment and verification of constancy of performance of the product  
System 2+ (FPC Certificate No. 1370-CPR-1705  
Conby and 1370-CPR-1706 Hartlepool)

Notified body: Notified body No. 1370  
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Italy



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Date 01/11/2019

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 470 max 630	
Elongation longitudinal transverse	Nominal thickness (mm)	Values min (%)	
	≤ 65	22 20	
Impact strength (longitudinal)	Grade	Impact Value min. average (J) at Test Temp (°C)	
	NH	40J at -20°C	
Weldability (CEV)	Nominal thickness (mm)	Values max (%)	
	> 16 ≤ 65	0.43 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*	
Tolerances on dimensions and shape	Round, square, rectangular and elliptical hollow sections	The product is suitable for hot dip galvanizing according to EN ISO 1461:2009 and fulfils the conditions of Category B of EN ISO 14713-2:2009	
	In accordance with EN 10210-2: 2006		

Notes: \*GF – Fully killed fine grain steel containing nitrogen binding elements

# CE

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13

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EN 10210-1: 2006

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Performance declared for the following essential characteristics (see Table 1):

Yield strength  
Tensile strength  
Elongation  
Impact strength  
Weldability  
Durability

Tolerances on dimensions and shape

Dangerous Substances: No Performance Determined (NPD)