

Declaration of Performance

(according to Regulation EU No 305/2011)

Ref. TST Hybox420-MH

Cold formed structural hollow sections produced from fine grain steel Grade S420MH / 1.8847 according to EN 10219-1

For use in structural fabrications in accordance with EN 1090,
when supplied with 3.1 certification to EN 10204 containing
product identification details.

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System of assessment and verification of constancy of
performance of the product
System 2+

NL - FPC Certificate No: 0038/CPR/RQA20070001/A
UK - FPC Certificate No: 0038/CPR/LRQ0840080/B

Notified factory production control certification body No. 0038
performed the initial inspection of the manufacturing plant and of
factory production control and the continuous surveillance,
assessment, and evaluation of factory production control and
issued the certificate of conformity of the factory production
control

Notified Body
Lloyds Register Verification Limited
71 Fenchurch Street, London, EC3M 4BS
Tel :+44 (0)207 423 2428
Email : ecdirectives@lr.org
Website : www.lr.org



Essential characteristic	Performance			Harmonised technical specification
	Yield strength	Nominal thickness (mm)		
>		<=		
	-	16	420	
Tensile strength	Nominal thickness (mm)		Values (MPa)	
	>	<=	min max	
	-	16	500 660	
Elongation	Nominal thickness (mm)		Values min (%)	
	>	<=	long.	
	-	16	19	
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 (%)	
	>	<=		
	-	16	0.43	
Durability	Nominal thickness (mm)		Composition (cast) (max. unless otherwise shown)	
	<=16		C 0.16 Si 0.50 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 0.020	
			GF deoxidation*	
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: *GF – Fully killed fine grain steel containing nitrogen binding elements



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EN 10219-1: 2006

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Information on regulated characteristics in accordance with
EN10219 for:

Elongation :
Tensile Strength :
Yield Strength :
Impact Strength :
Weldability :
Durability :

Dangerous Substances : No Performance Determined