

TATA STEEL



Celsius® 420 NH test certification

Visible quality assurance



CE Mark which indicates material is fully compliant with European Construction Product Regulations (CPR)

Celsius® 420 is supplied with guaranteed 3.1 certification. Other materials may have a representative 2.2 test report.

44 (0) 1536 402121
44 (0) 1536 404111



0038 0840080

INSPECTION CERTIFICATE
EN10204 Type 3.1

A02

Date	12/02/14	Z02
Cert No.		A03
Del. Note	/0000	

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Tata Steel Ref.No.	Sales	Works	A08
Customer Order No.			A07

Product Description B01-B04

CELSIUS HOT FINISHED WELDED STEEL RECTANGULAR HOLLOW SECTION TO EN 10210 : 2006 GRADE S420NH. (2T MAX CORNER PROFILE)

003/A
SUBJECT TO FINAL COATING

NORMALISED ROLLED
MADE IN UK

S=Stripped Section			F=Full Section			KV=Charpy - V			HV= Hardness Vickers(10Kg Load)			HR=Hardness Rockwell B					
Tensile Test						Impact/Hardness Tests						Steel Making Process					
C01 C02 C10	Yield Stress Re (N/mm ²)	C11 Tensile Strength Rm (N/mm ²)	C12 Elong A 5.65 (%)	C13 Test Type	C40 C30 Width (mm)	C41 Temp (C)	C42 C31 Values (J)	C43 C32 Ave (J)	BASIC OXYGEN STEEL								
B L S	479.0	585.0	30		B L	KV	5.0	-20	86 97 88	90	Other Tests						
WELD SEAM 100% EDDY CURRENT TESTED TO EN 10246-3											C50-C69 D02-D99						
FLATTENING TEST FOR SEAM WELD QUALITY CONTROL, SATISFACTORY																	
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Co	Ni	Al	B	Cu	N	Nb	Sn	Ti	V	CEV				
02	0.022	0.018	0.0001	0.019	0.017	0.002	0.002	0.001	0.170	0.41				
0	0.80	MIN 0.020*	---	0.70	0.025	0.050	---	0.03	0.20	0.50				

Compliance with European Regulation. The CE mark shown in Corby Works Inspection Document is only applicable to product
standards (EN 10210) EN 10219, EN 10255) harmonized with the Construction Products Regulation (CPR) 89/106/EEC.
Corby Works Quality System complies with the Pressure Equipment Directive (PED) 97/23/EC Annex I Para 4.3.
For end users - only tubes in accordance with EN 10217 have a presumption of conformity with the PED.
Certified by Tata Steel UK Limited and comply with the requirements of the Product Description.


S.M.Jeffrey
Quality Manager

Z02
A05

This document has been prepared by a
computer system and is valid without signature.

* If sufficient N-binding elements are present, the minimum total Al content does not apply

Authorisation



Weld seam test
which is mandatory for certification
(not required for 2.2 test report)

Non-mandatory tests which we
guarantee for our quality control
and your added assurance

Celsius® 420 has guaranteed max 0.45
compared to the standard EN 10210
(0.5)

A certified product that you can rely on

When you specify **Celsius® 420** hot finished hollow sections, you need to be sure that the correct material has been supplied. Use of substitutes can result in an inferior structural performance – with serious consequences.

To give you confidence, we've made sure that **Celsius® 420** is sold only with full certification. The Inspection Certificate Type 3.1 supplied with this product is your guarantee that **Celsius® 420** is manufactured exclusively from fine grain, normalised steel to EN10210:S420NH standard. For building structures, this means complete assurance that your materials comply with the material requirements of all relevant British and European standards.

The Inspection Certificate Type 3.1 supplied with **Celsius® 420** gives you all the information that you need for peace of mind. It clearly shows:

- a description of the product - including confirmation of a 2T corner profile
- the mandatory tests undertaken for EN10210:S420NH certification
- the additional, non-mandatory tests undertaken by Tata Steel for extra quality assurance
- full chemical analysis (14 chemical elements) confirming that **Celsius® 420** is produced using fully-killed, fine grain steel – and providing you with full visibility and traceability
- the CE mark to prove that the material is fully compliant with the European Construction Product Regulation
- the Tata Steel name and symbol – providing assurance that your product is from a proven, reliable and fully traceable source

Celsius® 420 Hot Finished Hollow Sections

- Formed at normalising temperature
- Higher sectional properties
- Fine grain structure
- Uniform mechanical properties
- Weldable in corner regions
- Higher compression capacity
- Negligible residual stress
- Tighter corner profile
- Suitability for galvanising
- Fire resistance capability
- Proven dynamic performance
- Guaranteed CEV max 0.45
- Guarantees full compliance with EN10210: S420NH
- Guarantees Specific Inspection so material matches test certificate
- Guarantees a minimum charpy impact, average value of 40J @ -20°C
- Guarantees full compliance with CE marking under the Construction Product Regulation (CPR)
- Tighter corner profile of 2T better than EN10210 which is to a maximum of 3T
- Meets and exceeds the J2H specification

www.tatasteelconstruction.com

While care has been taken to ensure that the information contained in this brochure is accurate, neither Tata Steel Europe Limited, nor its subsidiaries, accept responsibility or liability for errors or for information which is found to be misleading.

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English Language TST77:PDF:UK02/2015