

DECLARATION OF PERFORMANCE N°0099/CPR/A81/0013

1. Name and identification code:

Hollow Steel section: CFCHS – EN 10219, CFRHS – EN 10219.

2. Type, lot or serial number:

Shape of cross-sections	Dimensions	Thickness	Steel designation
Circular – CHS (RE)	Diameter up to 219 mm	Up to 10 mm	S235JRH, S275J0H, S275J2H, S355J0H, S355J2H
Square – RHS (CU)	Up to 180x180 mm		
Rectangular – RHS (RC)	Up to 250x100 mm Up to 200x150 mm		

3. Designed use:

In metal structures or in metal and concrete mixed structures

4. Name and address of manufacturer:

Tubos del Mediterráneo, S.A.
 P.I. SEPES - C/Isaac Newton, s/n - 46500 Sagunto (Valencia-España).

5. System for Evaluation and verification of performances constancy:

System 2+

6. Notified Body:

AENOR (Spanish Association for Standardization and Certification) number OC-P/137 has certified the manufacturing production control system on the basis of an initial control of the Factory and of the manufacturing production control system and of ongoing surveillance, **evaluation and approval of the manufacturing production control system according to the 2+ evaluation system issuing the certificate of conformity, issuing the certificate of conformity 099/CPR/A81/0013 with date update 05/09/2021.**

7. Declared performances:

Essential features	Performances		Harmonized Technical specifications
	Circular section	Square or rectangular section	
Dimensional and shape tolerances (D, B y H)	±1% with a minimum of ±0.5mm and a maximum of ±10mm	Face length mm	Annex ZA EN 10219
		Tolerances	
	H, B <100 100 ≤ H, B ≤ 200 H, B > 200	±1% with a minimum of ±0.5 mm ±0,8% ±0,6%	
Thickness(T)	T ≤ 5 mm ± 10% T > 5 mm ± 0,5 mm	T ≤ 5 mm ± 10% T > 5 mm ± 0,5 mm	
Ovality(O)	2% for hollow sections with a diameter/thickness ratio not exceeding 100		
Concavity/convexity(x1,x2)		Max. 0.8% with a minimum of 0.5mm	
Squaring of faces(θ)		90° ± 1°	
Outside corner rounding(C1, C2 or R)		T ≤ 6 6 < T ≤ 10 10 < T	1,6T a 2,4T 2,0T a 3,0T 2,4T a 3,6T
Twisty(V)		2mm plus 0.5mm/m length	

Straightness(e)	0.20% of the total length and 3 mm on any section of 1 m in length	0.15% of the total length and 3 mm on any section of 1 m in length			Annex ZA EN 10219
Elongation	Steel	Minimum elongation (A)			
	S235JRH	24 % (a)			
	S275J0H	20 % (b)			
	S275J2H				
	S355J0H				
	S355J2H				
(a) For thicknesses > 3mm and profile sizes D/T < 15 (circular section) and (B+H)/2T < 12.5 (square and rectangular section), the minimum elongation is reduced by 2 units. For thicknesses ≤ 3mm, the minimum elongation value is 17%. (b) For profile sizes D/T < 15 (circular section) and (B+H)/2T < 12.5 (square and rectangular section), the minimum elongation is reduced by two units.					
Yield and tensile resistance strength	Steel	Min. Yield strength (R _{eH})	Tensile resistance strength (R _m)		
		Thickness ≤ 16mm	Thickness < 3mm	Thickness ≥ 3mm	
	S235JRH	235 MPa	360-510	360-510 MPa	
	S275J0H	275 MPa	430-580 MPa	410-560 MPa	
	S275J2H				
	S355J0H	355 MPa	510-680 MPa	470-630 MPa	
S355J2H					
Impact testing	Steel	Minimum breakage energy upon impact			
		Test temperature			
		-20 °C	-0 °C	20 °C	
	S235JRH (a)	-	-	27 J	
	S275J0H (a)	-	27 J	-	
	S275J2H	27 J	-	-	
	S355J0H (a)	-	27 J	-	
	S355J2H	27 J	-	-	
Shock flexions tests are not necessary for nominal thicknesses of <6mm. (a) The shock flexion characteristics are only verified if option 1.3 has been specified.					
Weldability	Steel	CEV(%)			
	S235JRH	<0,35%			
	S275J0H	<0,40%			
	S275J2H	<0,40%			
	S355J0H	<0,45%			
	S355J2H	<0,45%			
Durability	NDP				

8. The performances of the product identified in points 1 and 2 are in conformity with the performance declared in point 7.

This declaration of performances is issued under the sole responsibility of the manufacturer indicated in point 4.



Sagunto, 06th JUNE 2022.