

DECLARATION OF PERFORMANCE AND CE MARKING

ISSUED IN ACCORDANCE WITH EUROPEAN REGULATION OF CONSTRUCTION PRODUCTS No. 305/2011

Nº 172013

1. Unique identification code of the product-type:

Cold formed welded structural hollow sections of non-alloy and fine grain steels.

Shaped sections	Steel designation
CIRCULAR	S235JRH, S275J0H, S275J2H, S275MH, S355J0H, S355J2H, S355K2H, S355MH, S420MH, S460MH
SQUARE	
RECTANGULAR	

2. Name and contact address of the manufacturer:

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3. Intended use or uses of the construction product:

In metal structures or in composite metal and concrete structures.

4. System of assessment and verification of constancy of performance:

SYSTEM 2+

5. Notified body:

The notified body No. 0099 AENOR has performed the initial inspection of the manufacturing plant and factory production control and continuous monitoring, verification and assessment of factory production control, according to the evaluation system 2+, issuing the certificate of conformity of factory production control No. 0099 / CPR / A81 / 0022 dated February 1, 2008.

6. Declared performance:

Essential characteristic	Performance			Harmonised technical specification	
	Circular hollow sections	Square and rectangular hollow sections			
Outside dimensions (D,B and H)	± 1% with a minimum of ±0,5 mm and a maximum of ± 10 mm	Side length (mm)	Tolerance	EN 10219	
		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 - ± 0,5mm	T ≤ 5 mm - ± 10 % T > 5 mm - ± 0,5mm		EN 10219	
Out-of-roundness (O)	2% for hollow sections having a diameter to thickness ratio not exceeding 100	-		EN 10219	
Concavity / Convexity	Max. 0,8% with a minimum of 0,5 mm			EN 10219	
Elongation (A)	Steel Grade	Minimum elongation (A)%		EN 10219	
	S235JRH	24 ^a			
	S275J0H	20 ^b			
	S275J2H	20 ^b			
	S275MH	24 ^b			
	S355J0H	20 ^b			
	S355J2H	20 ^b			
	S355K2H	20 ^b			
	S355MH	22 ^b			
	S420MH	19 ^b			
S460MH	17 ^b				
(a) For thicknesses > 3mm and section sizes D/T < 15 (round) and (B+H)/2T < 12,5 (square and rectangular) the minimum elongation is reduced by 2. For thicknesses ≤ 3 mm the minimum value for elongation is 17 %.					
(b) For section sizes D/T < 15 (round) and (B+H)/2T < 12,5 (square and rectangular) the minimum elongation is reduced by 2.					
Tensile strength and Yield strength	Steel Grade	Minimum yield strength (R _{eH}) MPa	Tensile strength (R _m) MPa		EN-10219
		Specified thickness ≤ 16 mm	Specified thickness < 3mm	Specified thickness ≥ 3mm	
	S235JRH	235	360-510	360-510	
	S275J0H	275	430-580	410-560	
	S275J2H	275			
	S275MH	275	360-510		
	S355J0H	355			
	S355J2H	355	510-680	470-630	
	S355K2H	355			
	S355MH	355	450-610		
S420MH	420	500-660			
S460MH	460	530-720			
Impact strength	Steel Grade	Minimum impact energy KV (J)			EN-10219
		At test temperatura of (°C)			
		-20 °C	0°C	20°C	
	S235JRH ^c	-	-	27	
	S275J0H ^c	-	27	-	
	S275J2H	27	-	-	
	S275MH	40 ^d	-	-	
	S355J0H ^c	-	27	-	
	S355J2H	27	-	-	
	S355K2H	40 ^d			
S355MH	40 ^d				
S420MH	40 ^d				
S460MH	40 ^d				
(c) These grades are inspected only if the customer requests the option 1.3 or 1.6 of EN 10219.					
(d) This value corresponds to 27 J at a test temperature of -30 °C.					
(e) The values in this table correspond to a standard test piece width 10 mm . These values shall be reduced in direct proportion of the actual width of the test piece compared to that of the standard test piece.					
Weldability	Steel Grade	Carbon equivalent CEV (%)			EN-10219
	S235JRH	< 0,35			
	S275J0H				
	S275J2H	< 0, 40			
	S275MH	< 0,34			
	S355J0H				
	S355J2H	< 0,45			
	S355K2H				
	S355MH	< 0,39			
	S420MH	< 0,43			
S460MH	< 0,46				
Durability	NPD (No Performance Determined)			EN-10219	

7. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. | This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

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 Angel E. Macanas Vicente (Quality Manager)
 Las Torres de Cotillas (Murcia) – Spain. 21 November 2016