

DECLARATION OF PERFORMANCE				
NR. 0103/002 Rel. 1				
Identification code of the product-type	Welded tube made of non-alloy structural steel S275J0H in accordance with EN10219:2006.			
Identification of the construction product	In accordance with the information included in the identification label with barcode and/or bundle number and in the inspection certificate.			
Intended use of the construction product	Cold formed welded structural hollow sections of circular, square, or rectangular forms formed cold without subsequent heat treatment.			
Manufacturer (registered office)	Marcegaglia S.p.A. Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia			
Production plant	Casalmaggiore s.s.420 Sabbionetana – 26041 Casalmaggiore (CR) - Italia			
System of assessment and verification of constancy of performance of the construction product	2+			
Name and identification number of the notified body	RINA Service S.p.A. – Via Corsica, 12 – 16128 Genova - Italia 0474			

Issued the certificate of conformity of the factory production control on the basis of the following elements:

- starting inspection of the production plant and of the factory production control.
- surveillance, evaluation and continuous audits of the factory production control.

DECLARED PERFORMANCE

Essential characteristics	Performance	Harmonised technical specification		
Tolerances on dimensions and shape	in compliance with table 2	EN10219-2:2006		
Elongation				
Tensile strength	in compliance with table 1	EN10219-1:2006		
Yield strength	in compliance with table 1			
Impact strength				
Weldability (CEV)	0,40% max			
Durability	N.P.D.			

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of Marcegaglia S.p.A. by:

Roberto Ing. Ferrari

Casalmaggiore Plant Manager

Casalmaggiore 21/07/2014

This declaration of performance is valid only in presence of the material identification label and the waybill or the inspection certificate issued after delivery.



Table 1 – Mechanical properties							
Steel	grade	Minimum yield strength R _{eH}	Tensile strength R _m		Minimum elongation A (c)	Minimum impact energy	
Steel name Steel number	[MPa]	[MPa]		[%]	KV in J ^(d)		
	Steel number	Specified thickness in mm			Test	Min. impact	
		≤ 16	< 3	≥ 3 ≤ 40	≤ 40	temperature	energy
S275J0H ^(a)	1.0149	275	430÷580	410÷560	20 ^(b)	0°	27

- Impact properties are verified only when option 1.3 is specified.
- b. See derogations here below:
 - For thicknesses > 3 mm and section sizes D/T < 15 (round) e (B+H)/2T < 12,5 (square and rectangular) the minimum elongation is reduced by 2.
 - For thicknesses ≤ 3,0 mm the minimum value for elongation is 17%
- C.
- For thicknesses < 3,0 mm the percentage elongation may be reported for a gauge length of 80 mm or 50 mm Impact test, when applicable or required, shall be carried out in accordance with EN10219-1. Impact test is not required for specified thicknesses < 6 mm. d.

	Table 2 – Toler	ances on shape a	nd mass		
	Circular hollow sections		Square and rectangular hollow sections		
Outside dimensions (D, B e H) ⁽⁴⁾	\pm 1% with a minimum of \pm 0,5 mm and a maximum of \pm 10 mm		H, B < 100 mm \Rightarrow ± 1% with a minimum of ± 0,5 mm		
			100 mm \leq H, B \leq 200 mm \Rightarrow \pm 0,8%		
			H, B > 200 mm $\Rightarrow \pm 0.6\%$		
Thickness (T)	For D \leq 406,4 mm: T \leq 5 mm \Rightarrow ± 10%		T ≤ 5 mm ⇒ ± 10%		
			$T > 5 \text{ mm} \Rightarrow \pm 0.5 \text{ mm}$		
	T >5 mm \Rightarrow ± 0,5mm		1 - 9 mm -> ± 0,5 mm		
	per D > 406,4 mm		_		
	± 10% with a maximum of ± 2mm				
	2% for hollow sections having a $D/T \le 100^{(1)}$ using the				
Out of roundness (O)	formula: $O(\%) = \frac{D \max - D \min}{} *100$		-		
	formula: $O(\%) = {D}$				
	D		114 0.00/ :!!		
Concavity/Convexity (x ₁ , x ₂) ⁽²⁾	-		Max. 0,8% with a minimum of 0,5mm using the formula:		
			$\frac{x_1}{x_1} * 1000\% \cdot \frac{x_1}{x_1} * 1000\% \cdot \dots$		
			$\frac{x1}{B}$ *100%; $\frac{x1}{H}$ *100%; ecc.		
Squareness of side (θ)			90° ± 1°		
oquareriess or side (0)			$T \le 6 \text{ mm}$ $\Rightarrow 1.6T \div 2.47$	 Г	
External corner profile	-		, , , , , , , , , , , , , , , , , , , ,		
(C ₁ , C ₂ or R)			$6 < T \le 10 \qquad \Rightarrow 2.0T \div 3.07$	i	
			$10 < T$ $\Rightarrow 2,4T \div 3,6T$	Γ	
Twist (V)	-		2mm plus 0,5 mm/m length		
Straightness (e)	0,20 % of total length and 3 mm over any 1 m length.		0,15 % of total length and 3 mm over any 1 m length		
Mass (M)			ual delivered length		
Tolerances on length ⁽³⁾		< 6000mm	\Rightarrow 0; + 5 mm		
	Exact length	\geq 6000mm and \leq 1	and ≤ 10000mm ⇒ 0; + 15 mm		
		> 10000mm	\Rightarrow 0; + 5 mm + 1mm/m		
	Approximate length	> 4000mm	⇒ 0; + 50 mm		

- Where D/T > 100 the tolerances on out of roundness shall be agreed.
- The tolerance on convexity and concavity is independent of the tolerance on outside dimensions.
- 3. The manufacturer shall establish at the time of enquiry and order the type of length range or length.
- All external dimensions, including out of roundness, shall be measured at the minimum distance of 100 mm from the end of the hollow