


DECLARATION OF PERFORMANCE		
NR C3007		Rev. 0
Product Identification Code	Welded tube made of structural steel S235JRH in accordance with EN10219	
Identification	According to the information stated on the ID label with barcode / bundle number and bundle number in the inspection certificate.	
Destiny and scope of application of product	Cold formed welded structural hollow sections of round, square, or rectangular shape for structural uses.	
Manufacturer (registered office)	Marcegaglia Poland Sp.zo.o. Ul. Kaliska 72, 46-320 Praszka - Poland	
Production Plant	Ligota Dolna Ul. Przemysłowa 1, 46-320 Kluczbork - Poland	
System of assessment and verification of the continuity of performance of the construction product	2+	
Name and ID number of the notified Body	RINA Service S.p.A. – Via Corsica, 12 – 16128 Genova - Italia 0474	
Certificates of Conformity for the control of the plant production have been issued for the following elements: <ul style="list-style-type: none"> • initial inspection of the production plant and of the factory production control. • surveillance, evaluation and regular audits of the factory production control. 		
DECLARED PERFORMANCE		
Main Features	Performance	Harmonised specification
Dimensional Tolerances	As per Table 2	EN10219-2:2006
Elongation	As per Table 1	EN10219-1:2006
Tensile strength		
Yield strength		
Impact strength		
Weldability (CEV)	0.35% max	
Durability	N.P.D.	
This declaration of performance is issued under the sole responsibility of the manufacturer identified above.		
Signed for and on behalf of Marcegaglia Poland Sp.zo.o:		
 Filippo Nicoli <i>Plant Director</i>		<i>Ligota Dolna, 01.07.2013</i>
This declaration of performance is valid only in presence of the product identification label and delivery document or of the inspection certificate issued at the delivery.		

Table 1 – Mechanical properties

Steel grade		Minimum yield strength R _{eH}	Tensile strength R _m		Minimum elongation % ^(c)	Minimum impact energy	
Steel name	Steel number	[MPa]	[MPa]		Lo=5.65√So	KV in J ^(d)	
		Nominal thickness in mm					Test temperature
		≤ 16	< 3	≥ 3 ≤ 40	≤ 40		
S235JRH ^(a)	1.0039	235	360+510	360+510	24 ^(b)	20°	27
a. Impact properties are verified only when option 1.3 is specified in the Order. b. See below exceptions: <ul style="list-style-type: none"> <input type="checkbox"/> For thickness > 3 mm and D/T section sizes < 15 (round) and (B+H)/2T < 12,5 (square and rectangular) the minimum elongation is reduced by 2. <input type="checkbox"/> For thickness ≤ 3,0 mm the minimum value for elongation is 17% c. For thickness < 3,0 mm the percentage elongation may be reported for a length of 80 mm or 50 mm d. Impact test, when applicable or required, shall be carried out in accordance with EN10219-1. Impact test are not required for nominal thickness < 6 mm.							

Parameter	Round hollow sections	Square and rectangular hollow sections
External dimension (D, B and H)⁽⁴⁾	± 1% with min value of ± 0,5 mm and max value of ±10mm	H, B < 100 mm ⇒ ± 1% with min value of ± 0,5 mm 100 mm ≤ H, B ≤ 200 mm ⇒ ± 0,8% H, B > 200 mm ⇒ ± 0,6%
Thickness (T)	for D ≤ 406,4 mm: T ≤ 5 mm ⇒ ± 10% T > 5 mm ⇒ ± 0,5mm for D > 406,4 mm ± 10% with max value of ± 2mm	T ≤ 5 mm ⇒ ± 10% T > 5 mm ⇒ ± 0,5 mm
Roundness deviation (O)	2% for hollow sections with proportion of diameter to thickness lower than 100 ⁽¹⁾ , where the roundness deviation is calculated for the formula: $O(\%) = \frac{D_{max} - D_{min}}{D} * 100$	
Concavity / Convexity (x₁, x₂)⁽²⁾		Max. 0,8% with minimum value of 0,5mm, using the formula: $\frac{x_1}{B} * 100\%; \frac{x_1}{H} * 100\%; \text{ etc.}$
Squareness of side (θ)		90° ± 1°
Corner radius (C₁, C₂ or R)		T ≤ 6 mm ⇒ 1,6T + 2,4T 6 < T ≤ 10 ⇒ 2,0T + 3,0T 10 < T ⇒ 2,4T + 3,6T
Twist (V)		2mm + 0,5 mm/m of length
Straightness (e)	0,20 % of total length and 3mm for each meter	0,15 % of total length and 3mm for each meter
Mass (M)	± 6 % for individual hollow section	
Length deviation (T)⁽³⁾	Exact lengths	< 6000mm ⇒ 0; + 5 mm
		6000mm ≤ L ≤ 10000mm ⇒ 0; + 15mm
	Approximate lengths	> 10000mm ⇒ 0; + 5 mm + 1mm/m
		> 4000mm ⇒ 0; + 50 mm
^{1.} When the proportion D/T > 100, then the roundness deviation shall be agreed. ^{2.} The tolerance of convexity and concavity is independent of the external dimensions' tolerances. ^{3.} At the stage of inquiry or order, the manufacturer shall agree the specific type of length and length range or length. ^{4.} Dimensional measures will be made at the distance of at least 100 mm from the end of the hollow section.		