

NR C3011		Rev. (
Product Identification Code	Welded tube made of structu	ural steel S355J2H in accordance with			
	EN10219				
Identification	According to the information stated on the ID label with barcode /				
Identification	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 Prasz	ka - Poland			
Production Plant	Ligota Dolna				
	UI. Przemysłowa 1, 46-320 K	Kluczbork - Poland			
System of assessment and verification of the					
continuity of performance of the construction product	2+				
	RINA Service S.p.A. – Via Corsica, 12 – 16128 Genova - Italia 0474				
Name and ID number of the notified Body					
Certificates of Conformity for the control of the	plant production have been is	sued for the following elements:			
 initial inspection of the production plan 	nt and of the factory production	control			
 initial inspection of the production plar surveillance, evaluation and regular a 					
surveillance, evaluation and regular a	udits of the factory production of	control.			
surveillance, evaluation and regular a		control.			
surveillance, evaluation and regular a DECLA	udits of the factory production of ARED PERFORMANCE	control.			
surveillance, evaluation and regular a DECLA Main Features	udits of the factory production of ARED PERFORMANCE Performance	Control. Harmonised specification			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances	ARED PERFORMANCE Performance As per Table 2	Control. Harmonised specification			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation	udits of the factory production of ARED PERFORMANCE Performance	Control. Harmonised specification EN10219-2:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength	ARED PERFORMANCE Performance As per Table 2 As per Table 1	control. Harmonised specification			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max	Control. Harmonised specification EN10219-2:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D.	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV)	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D.	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability This declaration of performance is issued und	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability This declaration of performance is issued und	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability This declaration of performance is issued und Signed for and on behalf of Marcegaglia Polar	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability This declaration of performance is issued und Signed for and on behalf of Marcegaglia Polar Filippo Nicoli	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Meldability (CEV) Durability This declaration of performance is issued und Signed for and on behalf of Marcegaglia Polar	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			
surveillance, evaluation and regular a DECLA Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength Weldability (CEV) Durability This declaration of performance is issued und Signed for and on behalf of Marcegaglia Polar Filippo Nicoli	ARED PERFORMANCE Performance As per Table 2 As per Table 1 0.45% max N.P.D. er the sole responsibility of the	EN10219-1:2006			



quality department

Table 1 – Mechanical properties							
Steel	grade	Minimum yield strength R _{eH}	Tensile strength R _m		Minimum elongation % ^(b)	Minimum impact energy	
Steel Steel		[MPa]	[MPa]		Lo=5.65√So	KV in J ^(c)	
name	number		Nominal thickness in mm			Test	impact
		≤ 16	< 3	≥ 3 ≤ 40	≤ 40	temperature	energy
S355J2H	1.0576	355	510÷680	470÷630	20 ^(a)	-20°	27
 a. For proportion D/T < 15 (round) and (B+H)/2T < 12,5 (square, rectangular) minimum is decreased by 2 b. For thickness < 3,0 mm the percentage elongation may be reported for a length of 80 mm or 50 mm c. 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	\pm 1% with min value of \pm 0,5 mm		H. B < 100 mm $\Rightarrow \pm 1\%$ with min value of ± 0.5 mm				
	and max value of ±10mm		100 mm ≤ H, B ≤ 200 mm \Rightarrow ± 0,8% H, B > 200 mm \Rightarrow ± 0,6%				
	for D ≤ 406,4 mm: T ≤ 5 mm \Rightarrow ±10%		$T \le 5 \text{ mm} \Rightarrow \pm 10\%$				
Thickness (T)	T>5 mm ⇒ ± 0,5mm		$T > 5 mm \Rightarrow \pm 0, 5 mm$				
	for D > 406,4 mm ± 10% with max value of ± 2mm						
	2% for hollow sections witch thickness lower than $100^{(1)}$, deviation is calculated for th $O(\%) = \frac{D \text{ ma}}{2}$	where the roundness					
Concavity / Convexity (x ₁ , x ₂) ⁽²⁾	_	~	Max. 0,8% with minimum value of 0,5mm, using the formula: $\frac{x1}{B}*100\%; \frac{x1}{H}*100\%; \text{ etc.}$				
Squareness of side (θ)	-		90° ± 1°				
Corner radius (C1, C2 or R)	-		$T \le 6 \text{ mm} \implies 1,6T \div 2,4T$ $6 < T \le 10 \implies 2,0T \div 3,0T$ $10 < T \implies 2,4T \div 3,6T$				
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⁾		$6000 \text{mm} \Rightarrow 0; + 5 \text{mm}$					
	Exact lengths	6000mm ≤ L ≤10000mm	⇒ 0; + 15mm				
		> 10000mm	⇒ 0; + 5 mm + 1mm/m				
	Approximate lengths	> 4000mm	\Rightarrow 0; + 50 mm				
¹ . When the proportion D	When the proportion D/T > 100, then the roundness deviation shell 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 shell agrees 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.							