MARCEGAGLIA POLAND quality department

NR C3011		Rev. 1		
Product Identification Code	Welded tube made of structural steel S355J2H 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			
BEAL				
	ARED PERFORMANC			
Main Features	Performance	Harmonised specification		
Main Features Dimensional Tolerances				
Main Features Dimensional Tolerances Elongation	Performance	Harmonised specification		
Main Features Dimensional Tolerances Elongation Tensile strength	Performance As per Table 2	Harmonised specification		
Main Features Dimensional Tolerances Elongation Tensile strength Yield strength	Performance	Harmonised specification		
Main Features Dimensional Tolerances Elongation Tensile strength Yield strength Impact strength	Performance As per Table 2 As per Table 1	Harmonised specification EN10219-2:2006		
Main FeaturesDimensional TolerancesElongationTensile strengthYield strengthImpact strengthWeldability (CEV)	Performance As per Table 2 As per Table 1 0.45% max	Harmonised specification EN10219-2:2006		
Main FeaturesDimensional TolerancesElongationTensile strengthYield strengthImpact strengthWeldability (CEV)Durability	Performance As per Table 2 As per Table 1 0.45% max N.P.D.	Harmonised specification EN10219-2:2006 EN10219-1:2006		
Main FeaturesDimensional TolerancesElongationTensile strengthYield strengthImpact strengthWeldability (CEV)	Performance As per Table 2 As per Table 1 0.45% max N.P.D. bove is in conformity with the accordance with Regulation	Harmonised specification EN10219-2:2006 EN10219-1:2006 e set of declared performance/s. This		
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Table 1 – Mechanical properties							
		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			
Futernal dimension	± 1% with min value of ± 0,5 mm and max value of ±10mm		H, B < 100 mm \Rightarrow ± 1% with min value of ± 0,5 mm			
External dimension (D, B and H) ⁽⁴⁾			$100 \text{ mm} \le \text{H}, \text{B} \le 200 \text{ mm} \Rightarrow \pm 0.8\%$			
	for $D \leq 406.4$ mm:		H, B > 200 mm $\Rightarrow \pm 0.6\%$			
	$T \le 5 \text{ mm} \Rightarrow \pm 10\%$		$T \le 5 \text{ mm} \Rightarrow \pm 10\%$			
Thickness (T)	T>5 mm ⇒ \pm 0,5mm		$T > 5 \text{ mm} \Rightarrow \pm 0, 5 \text{ mm}$			
	for D > 406,4 mm					
	$\pm 10\%$ with max value of $\pm 2mm$					
	2% for hollow sections witch proportion of diameter to thickness lower than $100^{(1)}$, where the roundness					
	deviation is calculated for the					
Roundness deviation (O)						
	$O(\%) = \frac{D \max - D \min}{D} * 100$					
		D				
			Max. 0,8% with minimum value of 0,5mm, using the			
Concavity / Convexity			formula:			
$(\mathbf{x}_1, \mathbf{x}_2)^{(2)}$	_		$\frac{x1}{R}$ *100%; $\frac{x1}{H}$ *100%; etc.			
(*1) *2)			$\frac{\overline{B}}{B}$ 10070, $\frac{\overline{H}}{H}$ 10070, etc.			
Squareness of side (θ)	-		90° ± 1°			
			$T \le 6 \text{ mm} \Rightarrow 1,6T \div 2,4T$			
Corner radius	-		$6 < T \leq 10 \Rightarrow 2,0T \div 3,0T$			
(C1, C2 or R)			$10 < T \implies 2,4T \div 3,6T$			
Twist (V)	•		2mm + 0,5 mm/m of length			
Straightness (e)	0.20 % of total length and 2mm for each mater		0,15 % of total length and 3mm for each meter			
Mass (M)		± 6 % for	individual hollow section			
	< 6000mm		\Rightarrow 0; + 5 mm			
	Exact lengths	6000mm ≤ L ≤10000mm ⇒ 0; + 15mm				
Length deviation (T) ⁽³⁾		> 10000mm	⇒ 0; + 5 mm + 1mm/m			
	Approximate lengths	> 4000mm	⇒ 0; + 50 mm			
¹ . When the proportion D	/T > 100, then the roundness deviation shell be agreed.					
The tolerance of convexity and concavity is independent of the external dimensions` tolerances.						
At the stage of inquiry or order, the manufacturer shell agrees the specific type of length and length range or length.						
. Dimensional measures will be made at the distance of at least 100 mm from the end of the hollow section.						
	will be made at the distance					