

DECLARATION OF PERFORMANCE

No. 0104/001

Rev. 3

Product identification code	Hot rolled steel product for Structural Use Grade S235JR as per EN10025-2:2004
Identification	According to the information stated on the ID label with barcode and/or Bundle number and in the Inspection Certificate
Intended use of the Construction Product	Flat product for use in metal structures or in metal complexes and concrete structures
Manufacturer (registered office)	Marcegaglia S.p.A. Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia
Production Plant	Ravenna Via Baiona n°141- 48123 Ravenna Italia
System of assessment and verification of constancy of performance of the construction product	2+
Notified Body and ID No	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:

- Starting inspection of the production plant and of the factory production control
- surveillance, evaluation and regular audits of the factory production control

DECLARED PERFORMANCE

Essential characteristics	Performance	Harmonised technical specification
Dimensional tolerances	As per (EN10051) Table 2	
Elongation	As per Table 1	EN10025-1:2004 EN10025-2:2004
Tensile strength		
Yield strength		
Impact strength		
Weldability (CEV)	0.35% max	
Durability (with no request for coating)	N.P.D.	

The performance of the above mentioned product complies with the set of declared performances.

This responsibility statement 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.

Aldo Dr. Fiorini
Ravenna Plant Manager

Ravenna 31/03/2015

This declaration of performance is valid only in presence of the product identification label and delivery document or of the inspection certificate issued after delivery

TABLE 1 – MECHANICAL CHARACTERISTICS

Mechanical characteristics at room temperature for steel grades with impact strength values												
GRADE	$R_{eH}^{(a)}$ MPa ^{8b)} Min	$R_m^{(a)}$ MPa ^(b)		Min. Percentage elongation after break % ^{a)}							Longitudinal Impact strength KV	
				$L_o = 80$ (mm)					$L_o = 5,65\sqrt{S_o}$	Temp. (°C)	Min energy (J)	
	Nominal Thickness (mm)											
	≤ 16	< 3	≥ 3 ≤ 100	a)	≤ 1	> 1 ≤ 1.5	> 1.5 ≤ 2	> 2 ≤ 2.5	> 2.5 < 3	≥ 3 ≤ 40	> 6 ≤ 150	
S235JR	235	360 ÷ 510	360 ÷ 510	L	17	18	19	20	21	26	20	27
				t	15	16	17	18	19	24		
a) For sheets and strips ≥600 mm wide, the transversal (t) to rolling direction is applied. For all other products, the values for parallel (l) to rolling direction are applied												
b) MPa = 1N/mm ²												

TABLE 2 – DIMENSIONAL TOLERANCES

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tolerance on thickness – dimension mm				
NOMINAL THICKNESS	tolerances for nominal width			
	≤ 1200	> 1200 ≤1500	> 1500 ≤1800	> 1800
≤ 2,00	± 0,17	± 0,19	± 0,21	-
> 2,00 ≤ 2,50	± 0,18	± 0,21	± 0,23	± 0,25
> 2,50 ≤ 3,00	± 0,20	± 0,22	± 0,24	± 0,26
> 3,00 ≤ 4,00	± 0,22	± 0,24	± 0,26	± 0,27
> 4,00 ≤ 5,00	± 0,24	± 0,26	± 0,28	± 0,29
> 5,00 ≤ 6,00	± 0,26	± 0,28	± 0,29	± 0,31
> 6,00 ≤ 8,00	± 0,29	± 0,30	± 0,31	± 0,35
> 8,00 ≤ 10,00	± 0,32	± 0,33	± 0,34	± 0,40
>10,00 ≤ 12,50	± 0,35	± 0,36	± 0,37	± 0,43
> 12,50 ≤15,00	± 0,37	± 0,38	± 0,40	± 0,46
>15,00 ≤ 25,00	± 0,40	± 0,42	± 0,45	± 0,50
tolerance on width - dimension mm				
NOMINAL WIDTH	raw edges		trimmed edges	
≤ 1200	-0 / +20		-0 / +3	
> 1200 ≤ 1850	-0 / +20		-0 / +5	
> 1850	-0 / +25		-0 / +6	
Tolerances on products with trimmed edges apply to nominal thickness ≤ 10mm For thickness > 10mm the values of + deviation must be agreed upon order placement				
tolerance on length - dimension mm				
NOMINAL LENGHT	lower		upper	
< 2000	-0		+10	
≥2000 < 8000	-0		+0,005 x nominal length	
≥ 8000	-0		+40	
tolerance on flatness – dimension mm				
NOMINAL THICKNESS	nominal length	flatness tolerances		special flatness tolerance
≤ 2,00	≤ 1200	18		9
	> 1200 ≤1500	20		10
	> 1500	25		13
> 2,00 ≤ 25	≤ 1200	15		8
	> 1200 ≤ 1500	18		9
	> 1500	23		12
Flatness requirements for strips must be agreed upon order placement				
tolerance on longitudinal edge camber or straightness				
SHEETS with nominal length < 5000 mm q = 0,5% of length SHEETS with nominal length ≥ 5000 mm, width ≥ 600 mm and with raw edges, q = 20 mm max over any portion 5000 mm long SHEETS with nominal length ≥ 5000 mm width ≥ 600 mm and trimmed edges, q = 15 mm max over any portion 5000 mm long				
Out of squareness				
The out of squareness for sheets is the orthoogonal projection of a transverse edge over a longitudinal one and must not exceed 1% of actual width of the sheet				