



**DECLARATION OF PERFORMANCE**

**No 0160/009**

**Rev. 0**

Product Identification Code	Hot rolled steel product for Structural Use. <b>Grade S355J2 as for EN10025-2:2005</b>	
Identification	According to the information stated on the ID label with barcode and/or Bundle number and in the Inspectin certificate.	
Intended use of the Construction Product	Flat product for use in metal structures or in metal complexes and concrete structures.	
Manufacturer (registered office)	<b>Marcegaglia S.p.A.</b> Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia	
Production Plant	<b>San Giorgio di Nogaro</b> Via Fermi, n°33 - 33058 San Giorgio Nogaro (UD) - Italia	
System of assessment and verification of the continuity of performance of the construction product	<b>2+</b>	
Name and ID number of the notified Body	RINA Service S.p.A. – Via Corsica, 12 – 16128 Genova - Italia <b>0474</b>	
Certificates of Conformity for the control of the plant production have been issued for the following elements: <ul style="list-style-type: none"> <li>Starting inspection of the production plant and of the factory production control.</li> <li>Surveillance, evaluation and regular audits of the factory production control.</li> </ul>		
<b>DECLARED PERFORMANCE</b>		
<b>Main Features</b>	<b>Performance</b>	<b>Harmonised specification</b>
Dimensional tolerances	As for Table 2	EN 10029: 2011
Elongation	As for Table 1	EN 10025-2: 2005
Tensile strength		
Yield strength		
Impact strength		
Chemical analysis	As for Table 3	
Durability (with no request for coating)	N.P.D.	
This declaration of performance is issued under the sole responsibility of the Manufacturer identified above.		
Signed for and behalf of Marcegaglia S.p.A.		
<b>Marco Ing. Ferrone</b> San Giorgio di Nogaro Plant Manager		San Giorgio di Nogaro 11/07/2013
This declaration of performance is valid only in presence of the product identification label and delivery document or of the inspection certificate.		



**TABLE 1 – MECHANICAL CHARACTERISTICS**

grade	<i>Minimum Yield strenght Reh<sup>a)</sup> Mpa</i>						<i>Tensile strenght Rm<sup>a)</sup> Mpa</i>	
	Nominal Thickness (mm)							
	≤ 16	> 16 ≤ 40	> 40 ≤ 63	> 63 ≤ 80	> 80 ≤ 100	> 100 ≤ 120	≥ 3 ≤ 100	> 100 ≤ 120
<b>S355J</b>	355	345	335	325	315	295	470 to 630	450 to 600
a) For plate, strip and wide flats with widths. ≥600 mm the direction transverse (t) to the rolling direction applies. For all other products the values apply for the direction parallel (l) to the rolling direction..								

**TABLE 1 – MECHANICAL CHARACTERISTICS (follows)**

grade	Position of test pieces <sup>a)</sup>	<i>Mechanical characteristics at room temperature for steel grades with impact strenght values</i>				<i>Impact strenght KV longitudinal for flat products</i>	
		Min. percentage elongation after break <sup>a)</sup> % L0=5,65√S0				temperature °C	Minimum energy (J)
		Nominal Thickness (mm)					
		≥ 3 ≤ 40	> 40 ≤ 63	> 63 ≤ 100	> 100 ≤ 120	≤ 120	
<b>S355J</b>	l	22	21	20	18	-20	27
	t	20	19	18	18		
a) For plate, strip and wide flats with widths. ≥600 mm the direction transverse (t) to the rolling direction applies. For all other products the values apply for the direction parallel (l) to the rolling direction.							

**TABLE 3 – CHEMICAL ANALYSIS**

grade	<i>Chemical composition of the ladle analysis for flat products of steel grades and qualities with values for impact strenght</i>								<i>Maximum CEV based on the ladle analysis</i>			
	C in % max for nominal thickness (mm)			Si % max	Mn % max	P % max	S % max	N % max	Cu % max	Nominal thickness (mm)		
	≤ 16	> 16 ≤ 40	> 40							≤ 30	> 30 ≤ 40	> 40 ≤ 120
<b>S355J</b>	0,20	0,20	0,22	0,55	1,60	0,025	0,025	0,012	0,55	0,45	0,47	0,47
a) For grades suitable for cold roll forming: C=0,22% max; S355J2C+N maximum nominal thickness 30 mm												
b) For nominal thickness > 30 mm: C=0,22% max.												



**TABLE 2 – DIMENSIONAL TOLERANCES**

*Tolerance on thickness (mm)*

Dimensions ( mm)	class A		class B		class C		class D	
	min	max	min	max	min	max	min	max
Nominal thickness t								
$8 \leq t < 15$	-0,5	+0,9	-0,3	+1,1	0	+1,4	-0,7	+0,7
$15 \leq t < 25$	-0,6	+1,0	-0,3	+1,3	0	+1,6	-0,8	+0,8
$25 \leq t < 40$	-0,7	+1,3	-0,3	+1,7	0	+2	-1,0	+1,0
$40 \leq t < 80$	-0,9	+1,7	-0,3	+2,3	0	+2,6	-1,3	+1,3
$80 \leq t < 150$	-1,1	+2,1	-0,3	+2,9	0	+3,2	-1,6	+1,6

*Tolerances on width for plates with trimmed edges <sup>a)</sup>*

Dimensions ( mm)	Tolerance on width for trimmed edges	
Nominal thickness t	Lower	Upper
$t < 40$	0	+20
$40 \leq t < 150$	0	+25

a) Tolerances on width for plates with untrimmed edges shall be the subject of agreement between the manufacturer and purchaser at the time of enquiry and order

*Tolerances on length*

Dimensions ( mm)	Tolerances on length	
Nominal length t	Lower	Upper
$l < 4000$	0	+20
$4000 \leq l < 6000$	0	+30
$6000 \leq l < 8000$	0	+40
$8000 \leq l < 10000$	0	+50
$10000 \leq l < 15000$	0	+75
$15000 \leq l \leq 20000$	0	+100

*Tolerances on flatness*

Dimensions ( mm)	Normal tolerances (class N)		Special tolerances (class S)	
	Measuring length ( mm)		Measuring length ( mm)	
Nominal thickness t	1000	2000	1000	2000
$8 \leq t < 15$	7	11	3	6
$15 \leq t < 25$	7	10	3	6
$25 \leq t < 40$	6	9	3	6
$40 \leq t < 150$	5	8	3	6

For anything not specified in tables or for exceptions as established in the reference standards