DECLARATION OF PERFORMANCE

No 0160/008 Rev. 0

Product Identification Code	Hot rolled steel product for Structural Use. **Grade S355J0 as for EN10025-2:2005**
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)	**Marcegaglia S.p.A.** Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia
Production Plant	**San Giorgio di Nogaro** Via Fermi, n°33 - 33058 San Giorgio Nogaro (UD) - Italia
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:

- Starting 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 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.

Marco Ing. Ferrone
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

	Minimum Yield strenght Reh[a)] Mpa						*Tensile strenght Rm[a)] Mpa*	
	Nominal Thickness (mm)							
grade	≤ 16	> 16 ≤ 40	> 40 ≤ 63	> 63 ≤ 80	> 80 ≤ 100	> 100 ≤ 120	≥ 3 ≤ 100	> 100 ≤ 120
S355J	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)

		Mechanical characteristics at room temperature for steel grades with impact strenght values				*Impact strenght KV longitudinal for flat products*	
		Min. percentage elongation after break [a)] % L0=5,65√S0				temperature °C	Minimum energy (J)
		Nominal Thickness (mm)					
grade	Position of test pieces [a)]	≥ 3 ≤ 40	> 40 ≤ 63	> 63 ≤ 100	> 100 ≤ 120	≤ 120	
S355J	l	22	21	20	18	0	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

	Chemical composition of the ladle analysis for flat products of steel grades and qualities with values for impact strenght								*Maximum CEV based on the ladle analysis*		
	C in % max for nominal thickness (mm)			Si % max	Mn % max	P % max	S % max	N % max	Cu % max	Nominal thickness (mm)		
grade	≤ 16	> 16 ≤ 40	> 40							≤ 30	> 30 ≤ 40	> 40 ≤ 120
S355J	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
b) For nominal thickness > 30 mm: C=0,22% max.

TABLE 2 – DIMENSIONAL TOLERANCES

Tollerance on thickness (mm)

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

Tollerances on width for plates with trimmed edges [a)]

Dimensions (mm)	Tollerance on width for trimmed edges	
Nominal thickness t	Lower	Upper
t < 40	0	+20
40 ≤ 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

Tollerances on length

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

Tollerances on flatness

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

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