

**DECLARATION OF PERFORMANCE****No 0160/019**

Product Identification Code	Hot rolled steel product for Structural Use. <b>Grade S355K2W as for EN10025-5:2019</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 Plates</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>
Notified Body and ID No	CARES - Pembroke House, 21 Pembroke Road Sevenoaks, Kent, TN13 1XR <b>1244</b>

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**

<b>Main Features</b>	<b>Performance</b>	<b>Harmonised specification</b>
Dimensional tolerances	As for EN 10029: 2011	EN 10025-5: 2019
Elongation	As for Table 1	
Tensile strength		
Yield strength		
Impact strength		
Chemical analysis	As for Table 3	
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.

This responsibility statement is issued in accordance with Construction Products Regulation 2011 (retained EU law EUR 305/2011) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020, under the sole responsibility of the manufacturer identified above.

Signed for and behalf of Marcegaglia Plates

**Marco Ing. Ferrone**  
San Giorgio di Nogaro Plant Manager

San Giorgio di Nogaro 12/10/2022

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>S355K2W</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>S355K2W</b>	l	22	21	20	18	-20	40
	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 of steel with improbe atmospheric corrosion resistance<sup>d)</sup>*

grade	C % max	Si % max	Mn %	P % max	S % max	N % max	Aggiunta di elementi che fissano l'azoto <sup>c)</sup>	Cr %	Cu %
<b>S355K2W</b>	0,16	0,50	0,50 - 1,50	0,030	0,030		yes-	0,40 - 0,80	0,25 - 0,55

a) It is permissible to exceed the specified values provided that for each increase of 0.001% N the P max. content will be reduced by 0.005%; the N content of the ladle analysis, however, shall not be more than 0.012%  
b) The max. value for nitrogen does not apply if the chemical composition shows a minimum total Al content of 0.020 % or if sufficient other N binding elements are presents..The binding elements shall be mentioned in the inspection document.  
c) The steels shall contain at least one of the following elements: Al total ≥ 0,020%, Nb: 0,015% - 0,060%, V: 0,02% - 0,12%, Ti: 0,02 – 0,10%.If these elements are used in combination, at least one of them shall be present with the minimum content indicated.  
d) The steels may show a Ni content of max.0.65%, 0.30% Mo, 0.15% Zr.

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