

DECLARATION OF PERFORMANCE
No 0160/015

Product Identification Code	Hot rolled steel product for Structural Use. Grade S420N as for EN10025-3:2005	
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 Plates 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: <ul style="list-style-type: none"> 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 EN 10029: 2011	EN 10025-2: 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.		
Signed for and behalf of Marcegaglia Plates		
Marco Ing. Ferrone <i>San Giorgio di Nogaro Plant Manager</i>		<i>San Giorgio di Nogaro 01/06/2020</i>
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

	<i>Minimum Yield strenght Reh^{a)} Mpa</i>			<i>Tensile strenght Rm^{a)} Mpa</i>
	Nominal Thickness (mm)			
grade	≤ 16	> 16 ≤ 40	> 40 ≤ 50	≤ 50
S420N	420	400	390	da 520 a 680
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)

	<i>Mechanical characteristics at room temperature for steel grades with impact strenght values ^a</i>			<i>Impact strenght KV longitudinal for flat products</i>	
	Min. percentage elongation after break % L0=5,65VSO			temperature °C	Minimum energy (J)
grade	spessore nominale mm				
	≤ 16	> 16 ≤ 40	> 40 ≤ 50	≤ 50	
S420N	19	19	19	-20	40 ^{b)}
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.					
b). This value corresponds with .27J at -30°C.					

TABLE 3 – CHEMICAL ANALYSIS

	<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 ^{c)}</i>
	C % max	Si % max	Mn %	P % max	S % max ^{a)}	Nb % max	V % max	Al tot % min ^{b)}	Ti % max	Cr % max	Ni % max	Mo % max	Cu % max	N % max	Nominal thickness (mm)
grade															≤ 50
S420N	0,20	0,60	1,00 - 1,70	0,030	0,025	0,05	0,20	0,02	0,05	0,30	0,80	0,10	0,55	0,025	0,48
a). For railway applications a maximum S content of 0.010% may be agreed at the time of enquiry and order.															
b). If sufficient other N-binding elements are present the minimum total Al content does not apply.															
c). The optional increase of elements capable of influencing the CEV shall be determined by the norm.															

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