

## DECLARATION OF PERFORMANCE

**N° 0101/071**

**Rev. 0**

Product Identification Code	Flat product made of Stainless Steel X5CrNi18-10 1.4301 Hot rolled, according to EN10088-4.
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	Stainless Steel Flat Product for use in the construction field
Manufacturer (registered office)	<b>Marcegaglia S.p.A.</b> Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia
Production Plant	<b>Gazoldo Degli Ippoliti</b> Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – 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 Services 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>	

### DECLARED PERFORMANCE

Main Features	Performance	Harmonised specification
Dimensional Tolerances	As per Table 2	EN9444-2:2009
Elongation	As per Table 1	EN10088-4
Tensile Strength		
Yield strength 0,2%		
Impact strength		
Weldability (Chemical Analysis)	According to specification	
Durability (Chemical Analysis)		
Resistance to brittle fracture (see Impact strength)	As per Table 1	
Hot Forming (see Elongation)		

This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of Marcegaglia S.p.A.

**Arnaldo Ing. Barini**  
Gazoldo D.I. Plant Manager

*Gazoldo D.I. 01/07/2013*

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 Properties of Hot Rolled Austenitic Steel**

Product Grade			Type of product	Thk mm	Yield Strength		Tensile Strength $R_m$ MPa <sup>(g)</sup>	Elongation Fracture		Impact Strength ISO-V KV		Intergranular corrosion resistance <sup>(f)</sup> Conditions of the supply
Quality	No.	Aisi			$R_{p0,2}$	$R_{p1,0}$ <sup>(b)</sup>		$A_{80}$ <sup>(d)</sup> < 3mm T %	$A$ <sup>(e)</sup> ≥ 3mm T %	> 10mm T. J		
			(a)	max	MPa <sup>(g)</sup> Min Transversal <sup>(c)</sup>					J min Long.	J min Transv.	
<b>X5CrNi18-10</b>	<b>1.4301</b>	<b>304</b>	H	13.5	210	250	520÷720	45	45	100	60	Yes

a) Type of Product: C = Cold Rolled, H = Hot Rolled  
 b) Value given as an indication only  
 c) For Continuous Hot Rolled products the min. value of  $R_{p0,2}$  must be increased by 20MPa and the minimum value of  $R_{p1,0}$  must be increased by 10MPa.  
 d) Values may apply to samples 80 mm long and 20 mm. wide, as well as 50 mm long and 12,5 mm wide  
 e) Values apply to samples having  $5,65\sqrt{S_0}$ .  
 f) When required, it must comply with EN ISO 3651-2  
 g) 1 MPa = 1N/mm<sup>2</sup>

**Table 2 – Dimensional Tolerances EN9444-2 (Continuously Hot Rolled)**

Tolerances of thickness for Wide Strips in coils and sheets <sup>(a)(b)</sup>		
Thickness range t (mm)	Tolerance for nominal widths (mm)	
	W ≤ 1400	1400 < W ≤ 2500
t ≤ 2,0	± 0,22	± 0,27
≥ 2.0 < 2.5	± 0,23	± 0,30
≥ 2.5 < 3.0	± 0,26	± 0,31
≥ 3.0 < 4.0	± 0,29	± 0,34
≥ 4.0 < 5.0	± 0,31	± 0,36
≥ 5.0 < 6.0	± 0,34	± 0,38
≥ 6.0 < 8.0	± 0,38	± 0,40

a) For wide strips, the stated tolerance shall not apply to the mill ends for a total length deriving from formula  $l_{(m)}=90/\text{nominal thickness (mm)}$  up to a maximum length of 20m for each coil.  
 b) Trimmed edges or sheared ends may have burrs..

Tolerances of Widths for Wide Strips and Sheets		
All widths	Tolerance in mm	
	Mill edges <sup>(a)</sup>	Trimmed edges <sup>(b)</sup>
	-0 +20	-0 +5

a) For wide strips, the stated tolerance shall not apply to the mill ends for a total length deriving from formula  $l_{(m)}=90/\text{nominal thickness (mm)}$  up to a maximum length of 20m for each coil.  
 b) Tolerances of trimmed edges shall apply to product with specified thickness ≤10mm; for nominal thickness ≥10mm the upper tolerance will have to be agreed upon at the time of enquiry and order.

Tolerances of Length for Sheets	
Nominal Length L	Regular Tolerance in mm
L ≤ 2000	-0 +10
2000 ≤ L < 20'000	-0 +0.005 L
L ≥ 20'000	As per agreement

Tolerances on Edge Camber		
Type of Product	Tolerances by length 5000(mm)	
	Mill Edges (mm)	Trimmed Edges (mm)
Coils in Wide Strips	20	15
Trimmed Edges Sheets	For lengths < 5000mm 0.5% of length	
Mill Edges Sheets	For lengths ≥ 5000mm 20mm for each length of 5000 of whole length	
Trimmed edges Sheets	For lengths ≥ 5000mm 15mm for each length of 5000 of whole length	

**Table 2 – Dimensional Tolerances EN9444-2 (Continuously Hot Rolled)**

Tolerances of Squareness for Sheets from Wide Strips						
Nominal Width	Out-of-squareness					
	1% of width					
Tolerances of Flatness for Sheets						
Nominal Thickness	Nominal Width				Tolerance of Flatness	
t ≤ 13	600	≤	w	≤	1200	23
	600	<	w	≤	1200	23
			w	≥	1500	38
Tolerances of Edge Displacement for products in Coils (mm for each side)						
Trimmed Edges						35
Mill Edges						70