

DECLARATION OF PERFORMANCE

No 0101/032

Rev. 4

| | |
|--|--|
| Product Identification Code | Hot rolled steel product for Structural Use. Grade S235J2 as per EN10025-2:2019 |
| 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 | Flat product for use in metal structures or in metal complexes and concrete structures. |
| Manufacturer (registered office) | Marcegaglia Carbon Steel Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia |
| Production Plant | Gazoldo Degli Ippoliti Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia |
| System of assessment and verification of the continuity of performance of the construction product | 2+ |
| Notified Body and ID No (CE mark) | RINA Services S.p.A. – Via Corsica, 12 – 16128 Genova - Italia 0474 |
| Notified Body and ID No (UKCA mark) | CARES - Pembroke House, 21 Pembroke Road Sevenoaks, Kent, TN13 1XR 1244 |

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 | EN10051:2010 | |
| Elongation | EN10025-2:2019 | EN10025-1:2004 |
| Tensile strength | | |
| Yield strength | | |
| Impact strength | | |
| Weldability (CEV) | | |
| 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 on behalf of Marcegaglia Carbon Steel

Dall'Acqua Stefano
 Gazoldo D.I. Plant Manager



Gazoldo D.I. 21/10/2022

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 CHARACTERISTICS

| Mechanical characteristics at room temperature for steel grades with impact strength values | | | | | | | | | | | | | |
|---|---|--|-----------|----|--|-----------|-----------|-----------|-----------|----------|---|-------|------------|
| GRADE | R _{eH} ^(a) MPa ^{8b)} Min | R _m ^(a) MPa ^(b) | | | Min. Percentage elongation after break % ^{a)} | | | | | | Longitudinal Impact strength KV | | |
| | | | | | L _o = 80 (mm) | | | | | | L _o = 5,65√S _o | Temp. | Min energy |
| | Nominal Thickness (mm) | | | | | | | | | | | (°C) | (J) |
| | ≤ 16 | < 3 | ≥ 3 ≤ 100 | a) | ≤ 1 | > 1 ≤ 1.5 | > 1.5 ≤ 2 | > 2 ≤ 2.5 | > 2.5 < 3 | ≥ 3 ≤ 40 | > 6 ≤ 150 | | |
| S235J2 | 235 | 360 + 510 | 360 + 510 | L | 17 | 18 | 19 | 20 | 21 | 26 | 20 | 27 | |
| | | | | t | 15 | 16 | 17 | 18 | 19 | 24 | | | |

a) For sheets and strips ≥600 mm wide, the transversal (t) to rolling direction is applied. For all other products, the values for parallel (l) to rolling direction are applied
b) MPa = 1N/mm²

TABLE 2 - DIMENSIONAL TOLERANCES

| Tolerance on Thickness – dimension (mm) | | | | |
|---|------------------------------|--------------|--------------|--------|
| NOMINAL THICKNESS | Tolerances for nominal width | | | |
| | ≤ 1200 | > 1200 ≤1500 | > 1500 ≤1800 | > 1800 |
| ≤ 2,00 | ± 0,17 | ± 0,19 | ± 0,21 | - |
| > 2,00 ≤ 2,50 | ± 0,18 | ± 0,21 | ± 0,23 | ± 0,25 |
| > 2,50 ≤ 3,00 | ± 0,20 | ± 0,22 | ± 0,24 | ± 0,26 |
| > 3,00 ≤ 4,00 | ± 0,22 | ± 0,24 | ± 0,26 | ± 0,27 |
| > 4,00 ≤ 5,00 | ± 0,24 | ± 0,26 | ± 0,28 | ± 0,29 |
| > 5,00 ≤ 6,00 | ± 0,26 | ± 0,28 | ± 0,29 | ± 0,31 |
| > 6,00 ≤ 8,00 | ± 0,29 | ± 0,30 | ± 0,31 | ± 0,35 |
| > 8,00 ≤ 10,00 | ± 0,32 | ± 0,33 | ± 0,34 | ± 0,40 |
| >10,00 ≤ 12,50 | ± 0,35 | ± 0,36 | ± 0,37 | ± 0,43 |
| > 12,50 ≤15,00 | ± 0,37 | ± 0,38 | ± 0,40 | ± 0,46 |
| >15,00 ≤ 25,00 | ± 0,40 | ± 0,42 | ± 0,45 | ± 0,50 |

| Tolerance on width - dimension (mm) | | |
|-------------------------------------|-----------|---------------|
| NOMINAL WIDTH | Raw edges | Trimmed edges |
| ≤ 1200 | -0 / +20 | -0 / +3 |
| > 1200 ≤ 1850 | -0 / +20 | -0 / +5 |
| > 1850 | -0 / +25 | -0 / +6 |

Tolerances on products with trimmed edges apply to nominal thickness ≤ 10mm
For thickness > 10mm the values of + deviation must be agreed upon order placement

| Tolerance on Length - dimension (mm) | | |
|--------------------------------------|-------|-------------------------|
| NOMINAL LENGHT | Lower | Upper |
| < 2000 | -0 | +10 |
| ≥2000 < 8000 | -0 | +0,005 x nominal length |
| ≥ 8000 | -0 | +40 |

| Tolerance on Flatness - dimension (mm) | | | |
|--|---------------|---------------------|----------------------------|
| NOMINAL THICKNESS | Nominal Width | Flatness tolerances | Special flatness tolerance |
| ≤ 2,00 | ≤ 1200 | 18 | 9 |
| | > 1200 ≤1500 | 20 | 10 |
| | > 1500 | 25 | 13 |
| > 2,00 ≤ 25 | ≤ 1200 | 15 | 8 |
| | > 1200 ≤ 1500 | 18 | 9 |
| | > 1500 | 23 | 12 |

Flatness requirements for strips must be agreed upon order placement

| Tolerance on longitudinal edge camber or straightness |
|--|
| SHEETS with nominal length < 5000 mm q = 0,5% of length |
| SHEETS with nominal length ≥ 5000 mm, width ≥ 600 mm and with raw edges, q = 20 mm max over any portion 5000 mm long |
| SHEETS with nominal length ≥ 5000 mm width ≥ 600 mm and trimmed edges, q = 15 mm max over any portion 5000 mm long |

| Out-of-squareness |
|---|
| The out-of-squareness for sheets is the orthogonal projection of a transverse edge over a longitudinal one and must not exceed 1% of actual width of the sheet. |