

DECLARATION OF PERFORMANCE
No 0160/018

| | |
|--|---|
| Product Identification Code | Hot rolled steel product for Structural Use. Grade S355J2W as for EN10025-5:2019 |
| 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 |
| Notified Body and ID No | 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 | 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^{a)} Mpa</i> | | | | | | <i>Tensile strenght Rm^{a)} Mpa</i> | |
|----------------|--|-----------|-----------|-----------|------------|-------------|---|-------------|
| | Nominal Thickness (mm) | | | | | | | |
| | ≤ 16 | > 16 ≤ 40 | > 40 ≤ 63 | > 63 ≤ 80 | > 80 ≤ 100 | > 100 ≤ 120 | ≥ 3 ≤ 100 | > 100 ≤ 120 |
| S355J2W | 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 ^{a)} | <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 ^{a)} % L0=5,65√S0 | | | | temperature °C | Minimum energy (J) |
| | | Nominal Thickness (mm) | | | | | |
| | | ≥ 3 ≤ 40 | > 40 ≤ 63 | > 63 ≤ 100 | > 100 ≤ 120 | ≤ 120 | |
| S355J2W | l | 22 | 21 | 20 | 18 | -20 | 27 ^{b)} |
| | 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^{d)}*

| grade | C % max | Si % max | Mn % | P % max | S % max | N % max | Aggiunta di elementi che fissano l'azoto ^{c)} | Cr % | Cu % |
|----------------|---------|----------|-------------|---------|---------|---------|--|-------------|-------------|
| S355J2W | 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 present..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