

DOP – DECLARATION OF PERFORMANCE 0160/019

DOC. 1355 Ed. 0 Rev. 03 Pag.1 di 2

| DECLARATION OF PERFORMANCE | | | | | | |
|--|---|--|--|--|--|--|
| No | 0160/019 Rev. 03 | | | | | |
| Product Identification Code | Hot rolled steel product for Structural Use. Grade S355K2W as for EN10025-5:2005 | | | | | |
| 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:

- 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 | |
| Elongation | | |
| Tensile strength | As for Table 1 | |
| Yield strength | AS IOI Table I | EN 10025-5: 2005 |
| Impact strength | | EN 10025-5. 2005 |
| 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

San Giorgio di Nogaro Plant Manager

San Giorgio di Nogaro 03/11/2015

This declaration of performance is valid only in presence of the product identification label and delivery document or of the inspection certificate.



DOP – DECLARATION OF PERFORMANCE 0160/019

DOC. 1355 Ed. 0 Rev. 03 Pag. 2 di 2

| TABLE 1 – MECHANICAL CHARACTERISTICS | | | | | | | | | |
|--------------------------------------|-----------|--|--|---|---|--|--|--|--|
| | Minimu | m Yield sti | Tensile strenght Rm ^{a)} Mpa | | | | | | |
| Nominal Thickness (mm) | | | | | | | | | |
| ≤ 16 | > 16 ≤ 40 | > 40 ≤ 63 | > 63 ≤ 80 | > 80 ≤ 100 | > 100 ≤ 120 | ≥ 3 ≤ 100 | > 100 ≤ 120 | | |
| 355 | 345 | 335 | 325 | 315 | 295 | 470 to 630 | 450 to 600 | | |
| | 355 | Minimum ≤ 16 > 16 ≤ 40 355 345 | Minimum Yield str ≤ 16 > 16 ≤ 40 > 40 ≤ 63 355 345 335 | Minimum Yield strenght Reserve Nor ≤ 16 > 16 ≤ 40 > 40 ≤ 63 > 63 ≤ 80 355 345 335 325 | Minimum Yield strenght Reha Mpa Nominal Thickness ≤ 16 > 16 ≤ 40 > 40 ≤ 63 > 63 ≤ 80 > 80 ≤ 100 355 345 335 325 315 | Minimum Yield strenght Reha) Mpa Nominal Thickness (mm) ≤ 16 > 16 ≤ 40 > 40 ≤ 63 > 63 ≤ 80 ≤ 100 > 100 ≤ 120 355 345 335 325 315 295 | Minimum Yield strenght Reha Mpa Tensile stress Nominal Thickness (mm) ≤ 16 > $16 \leq 40$ > $40 \leq 63$ > $63 \leq$ 80 ≤ 100 > $100 \leq$ 23 ≤ 100 80 | | |

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 (I) to the rolling direction..

| | TABLE 1 – MECHANICAL CHARACTERISTICS (follows) | | | | | | | | |
|-------|--|---|--------------|------------|-------------|---|--------------------|--|--|
| | | Mechanical characteristics at room temperature for steel grades with impact strenght values | | | | Impact strenght KV longitudinal for flat products | | | |
| | | Min. percentage elongation after break ^{a)} % L0=5,65√S0 | | | | temperature °C | Minimum energy (J) | | |
| | | Nominal Thickness (mm) | | | | | | | |
| grade | Position of test pieces a) | ≥ 3 ≤ 40 | > 40 ≤ 63 | > 63 ≤ 100 | > 100 ≤ 120 | ≤ 120 | | | |
| | 1 | 22 | 21 | 20 | 18 | | | | |
| S355 | | | | | | -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 (I) 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 | ax S % max N % max | | Aggiunta di elementi che fissano l'azoto ^{c)} | Cr % | Cu % |
| S355 | 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 contento f the ladle analysis, however, shall not be more than 0.012%

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

b) The max. value for nitrogen does not apply if the chemical composition shows a minimum total Al contenent 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.