

## DECLARATION OF PERFORMANCE

No. 0104/004

Rev. 2

|   |   |
|---|---|
| Product identification code   | Hot rolled steel product for Structural Use<br><b>Grade S275JR as per EN10025-2:2004</b>                                |
| 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)  | <b>Marcegaglia S.p.A.</b><br>Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia                             |
| Production Plant  | <b>Ravenna</b><br>Via Baiona n°141- 48123 Ravenna Italia  |
| System of assessment and verification of constancy of performance of the construction product | 2+  |
| Notified Body and ID No   | RINA Service S.p.A. – Via Corsica, 12 – 16128 Genova - Italia<br><b>0474</b>  |

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

| Essential characteristics                | Performance    | Harmonised technical specification |
|--|----------------|------------------------------------|
| Dimensional tolerances                   | As per Table 2 | EN10051:2010                       |
| Elongation                               | As per Table 1 | EN10025-1:2004<br>EN10025-2:2004   |
| Tensile strength                         |                |                                    |
| Yield strength                           |                |                                    |
| Impact strength                          |                |                                    |
| Weldability (CEV)                        | 0.40% max      |                                    |
| 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 on behalf of Marcegaglia S.p.A.

*Aldo Dr. Fiorini*  
Ravenna Plant Manager

*Ravenna 01/09/2014*

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 <sub>eH</sub> <sup>(a)</sup><br>MPa <sup>(bb)</sup><br>Min | R <sub>m</sub> <sup>(a)</sup> MPa <sup>(b)</sup> |           |     | Min. Percentage elongation after break % <sup>a)</sup> |           |           |           |          |           | Longitudinal Impact strength KV         |               |
|   |  |  |           |     | L <sub>o</sub> = 80 (mm)                               |           |           |           |          |           | L <sub>o</sub> =<br>5,65√S <sub>o</sub> | Temp.<br>(°C) |
|   | Nominal Thickness (mm)                                       |  |           |     |  |           |           |           |          |           |   | Temp.<br>(°C) |
| ≤ 16  | < 3  | ≥ 3 ≤ 100  | a)        | ≤ 1 | > 1 ≤ 1.5  | > 1.5 ≤ 2 | > 2 ≤ 2.5 | > 2.5 < 3 | ≥ 3 ≤ 40 | > 6 ≤ 150 |   |               |
| S275JR  | 275  | 430 ÷ 580  | 410 ÷ 560 | L   | 15   | 16        | 17        | 18        | 19       | 23        | 20                                      | 27            |
|   |  |  |           | t   | 13   | 14        | 15        | 16        | 17       | 21        |   |               |

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/mm<sup>2</sup>

**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 LENGTH                     | lower | upper                   |
| < 2000                             | -0    | +10                     |
| ≥2000 < 8000                       | -0    | +0,005 x nominal length |
| ≥ 8000                             | -0    | +40                     |

  

| tolerance on flatness – dimension mm |                |                     |                            |
|--------------------------------------|----------------|---------------------|----------------------------|
| NOMINAL THICKNESS                    | nominal length | flatness tolerances |                            |
|                                      |                | 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 |