

| DECLARATION OF PERFORMANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------|
| No 0101/036                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          | Rev. 2                   |
| Product Identification Code                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Hot rolled steel product for Structural Use. <b>Grade S355JR 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 Carbon Steel</b><br>Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – Italia                        |                          |
| Production Plant                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Gazoldo Degli Ippoliti</b><br>Via Bresciani, 16 – 46040 Gazoldo degli Ippoliti (MN) – 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 Services 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: <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                                                                                                                                                                                                                                                                                                                                                                                                                                                                | EN10051:2010                                                                                                             | EN10025-1:2004           |
| Elongation                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | EN10025-2:2004                                                                                                           |                          |
| 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.<br>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 Carbon Steel<br><br><div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 40%;"> <b>Arnaldo Ing. Barini</b><br/> <i>Gazoldo D.I. Plant Manager</i> </div> <div style="width: 30%; text-align: center;">  </div> <div style="width: 30%; text-align: right;"> <i>Gazoldo D.I. 02/11/2015</i> </div> </div> |                                                                                                                          |                          |
| 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>8b)</sup><br>Min | R <sub>m</sub> <sup>(a)</sup> MPa <sup>(b)</sup> |           | Min. Percentage elongation after break % <sup>a)</sup> |     |           |           |           |           |                                         | Longitudinal<br>Impact strength<br>KV |               |
|                                                                                                                                                                                  |                                                             |                                                  |           | L <sub>o</sub> = 80 (mm)                               |     |           |           |           |           | L <sub>o</sub> =<br>5,65√S <sub>o</sub> | Temp.                                 | Min<br>energy |
|                                                                                                                                                                                  | (°C)                                                        | (J)                                              |           |                                                        |     |           |           |           |           |                                         |                                       |               |
|                                                                                                                                                                                  | Nominal Thickness (mm)                                      |                                                  |           |                                                        |     |           |           |           |           |                                         |                                       |               |
|                                                                                                                                                                                  | ≤ 16                                                        | < 3                                              | ≥ 3 ≤ 100 | a)                                                     | ≤ 1 | > 1 ≤ 1.5 | > 1.5 ≤ 2 | > 2 ≤ 2.5 | > 2.5 < 3 | ≥ 3 ≤ 40                                | > 6 ≤ 150                             |               |
| S355JR                                                                                                                                                                           | 355                                                         | 510 ÷ 680                                        | 470 ÷ 630 | L                                                      | 14  | 15        | 16        | 17        | 18        | 22                                      | 20                                    | 27            |
|                                                                                                                                                                                  |                                                             |                                                  |           | t                                                      | 12  | 13        | 14        | 15        | 16        | 20                                      |                                       |               |
| 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                                  | ± 0,20                       | ± 0,22        | ± 0,24        | -      |
| > 2,00 ≤ 2,50                           | ± 0,21                       | ± 0,24        | ± 0,26        | ± 0,29 |
| > 2,50 ≤ 3,00                           | ± 0,23                       | ± 0,25        | ± 0,28        | ± 0,30 |
| > 3,00 ≤ 4,00                           | ± 0,25                       | ± 0,28        | ± 0,30        | ± 0,31 |
| > 4,00 ≤ 5,00                           | ± 0,28                       | ± 0,30        | ± 0,32        | ± 0,33 |
| > 5,00 ≤ 6,00                           | ± 0,30                       | ± 0,32        | ± 0,33        | ± 0,36 |
| > 6,00 ≤ 8,00                           | ± 0,33                       | ± 0,35        | ± 0,36        | ± 0,40 |
| > 8,00 ≤ 10,00                          | ± 0,37                       | ± 0,38        | ± 0,39        | ± 0,46 |
| > 10,00 ≤ 12,50                         | ± 0,40                       | ± 0,41        | ± 0,43        | ± 0,49 |
| > 12,50 ≤ 15,00                         | ± 0,43                       | ± 0,44        | ± 0,46        | ± 0,53 |
| > 15,00 ≤ 25,00                         | ± 0,46                       | ± 0,48        | ± 0,52        | ± 0,58 |

  

| 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 | Tolerances on Flatness by category |            |                                   |
|                                        |               | Category B                         | Category C | Category D                        |
| ≤ 25                                   | ≤ 1200        | 18                                 | 23         | To be agreed at the time of order |
|                                        | > 1200 ≤ 1500 | 23                                 | 30         |                                   |
|                                        | > 1500        | 28                                 | 38         |                                   |

Category B = 300MPa <  $R_e$  ≤ 360MPa  
 Category C = 360MPa <  $R_e$  ≤ 420MPa  
 Category D = 420MPa <  $R_e$  ≤ 900MPa

  

| 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. |