


| DECLARATION OF PERFORMANCE | | |
|---|---|---------------------------------|
| NR C3007 | | Rev. 1 |
| Product Identification Code | Welded tube made of structural steel S235JRH in accordance with EN10219 | |
| Identification | According to the information stated on the ID label with barcode / bundle number and bundle number in the inspection certificate. | |
| Destiny and scope of application of product | Cold formed welded structural hollow sections of round, square, or rectangular shape for structural uses. | |
| Manufacturer (registered office) | Marcegaglia Poland Sp.zo.o. Ul. Kaliska 72, 46-320 Praszka - Poland | |
| Production Plant | Ligota Dolna Ul. Przemysłowa 1, 46-320 Kluczbork - Poland | |
| 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: <ul style="list-style-type: none"> initial 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 per Table 2 | EN10219-2:2006 |
| Elongation | As per Table 1 | EN10219-1:2006 |
| Tensile strength | | |
| Yield strength | | |
| Impact strength | | |
| Weldability (CEV) | 0.35% max | |
| Durability | N.P.D. | |
| The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance 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 Poland Sp.zo.o:  Filippo Nicoli Plant Director | | |
| | | <i>Ligota Dolna, 03.11.2014</i> |
| This declaration of performance is valid only in presence of the product identification label and delivery document or of the inspection certificate issued at the delivery. | | |

Table 1 – Mechanical properties

| Steel grade | | Minimum yield strength R _{eH} | Tensile strength R _m | | Minimum elongation % ^(c) | Minimum impact energy | |
|------------------------------|---------------|--|---------------------------------|---------|-------------------------------------|------------------------|------------------|
| Steel name | Steel number | [MPa] | [MPa] | | Lo=5.65√So | KV in J ^(d) | |
| | | Nominal thickness in mm | | | | | Test temperature |
| ≤ 16 | < 3 | ≥ 3 ≤ 40 | ≤ 40 | | | | |
| S235JRH^(a) | 1.0039 | 235 | 360÷510 | 360÷510 | 24 ^(b) | 20° | 27 |

a. Impact properties are verified only when option 1.3 is specified in the Order.
 b. See below exceptions:
 For thickness > 3 mm and D/T section sizes < 15 (round) and (B+H)/2T < 12,5 (square and rectangular) the minimum elongation is reduced by 2.
 For thickness ≤ 3,0 mm the minimum value for elongation is 17%
 c. For thickness < 3,0 mm the percentage elongation may be reported for a length of 80 mm or 50 mm
 d. Impact test, when applicable or required, shall be carried out in accordance with EN10219-1. Impact test are not required for nominal thickness < 6 mm.

| Parameter | Round hollow sections | Square and rectangular hollow sections |
|---|---|--|
| External dimension (D, B and H)⁽⁴⁾ | ± 1% with min value of ± 0,5 mm and max value of ±10mm | H, B < 100 mm ⇒ ± 1% with min value of ± 0,5 mm 100 mm ≤ H, B ≤ 200 mm ⇒ ± 0,8% H, B > 200 mm ⇒ ± 0,6% |
| Thickness (T) | for D ≤ 406,4 mm: T ≤ 5 mm ⇒ ±10% T > 5 mm ⇒ ± 0,5mm for D > 406,4 mm ± 10% with max value of ± 2mm | T ≤ 5 mm ⇒ ± 10% T > 5 mm ⇒ ± 0,5 mm |
| Roundness deviation (O) | 2% for hollow sections with proportion of diameter to thickness lower than 100 ⁽¹⁾ , where the roundness deviation is calculated for the formula: $O(\%) = \frac{D_{max} - D_{min}}{D} * 100$ | |
| Concavity / Convexity (x₁, x₂)⁽²⁾ | Max. 0,8% with minimum value of 0,5mm, using the formula: $\frac{x_1}{B} * 100\%; \frac{x_1}{H} * 100\%; \text{ etc.}$ | |
| Squareness of side (θ) | 90° ± 1° | |
| Corner radius (C₁, C₂ or R) | T ≤ 6 mm ⇒ 1,6T ÷ 2,4T 6 < T ≤ 10 ⇒ 2,0T ÷ 3,0T 10 < T ⇒ 2,4T ÷ 3,6T | |
| Twist (V) | 2mm + 0,5 mm/m of length | |
| Straightness (e) | 0,20 % of total length and 3mm for each meter | 0,15 % of total length and 3mm for each meter |
| Mass (M) | ± 6 % for individual hollow section | |
| Length deviation (T)⁽³⁾ | Exact lengths | < 6000mm ⇒ 0; + 5 mm |
| | | 6000mm ≤ L ≤ 10000mm ⇒ 0; + 15mm |
| | Approximate lengths | > 10000mm ⇒ 0; + 5 mm + 1mm/m |
| | | > 4000mm ⇒ 0; + 50 mm |

¹. When the proportion D/T > 100, then the roundness deviation shall be agreed.
². The tolerance of convexity and concavity is independent of the external dimensions' tolerances.
³. At the stage of inquiry or order, the manufacturer shall agree the specific type of length and length range or length.
⁴. Dimensional measures will be made at the distance of at least 100 mm from the end of the hollow section.