

| DECLARA | TION OF PERFORMANCE |
|--|---|
| NR C3010 | Rev. 1 |
| Product Identification Code | Welded tube made of structural steel S355J0H 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:

- 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 | | | |
| Tensile strength | As per Toble 1 | | |
| Yield strength | As per Table 1 | EN10219-1:2006 | |
| Impact strength | | EN 10219-1.2000 | |
| Weldability (CEV) | 0.45% 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

Ligota Dolna, 03.11.2014

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 st | rength R _m | Minimum elongation % ^(c) | Minimum impa | act energy |
| Steel | Steel | [MPa] | [M] | Pa] | Lo=5.65√So | KV in s | J ^(d) |
| name | number | | Nominal | thickness in mm | | Test | impact |
| | | ≤ 16 | < 3 | ≥ 3 ≤ 40 | ≤ 40 | temperature | energy |
| S355J0H ^(a) | 1.0547 | 355 | 510÷680 | 470÷630 | 20 ^(b) | 0° | 27 |

- a.
- Impact properties are verified only when option 1.3 is specified in the Order.

 For proportion D/T < 15 (round) and (B+H)/2T < 12,5 (square, rectangular) minimum is decreased by 2 b.
- For thickness < 3,0 mm the percentage elongation may be reported for a length of 80 mm or 50 mm c.
- 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 se | ctions | Square and rectangular hollow sections |
|---------------------------------------|--|----------------------------------|---|
| | ± 1% with min value of ± 0,5 mm | | H, B < 100 mm \Rightarrow ± 1% with min value of ± 0,5 mm |
| External dimension | | | 100 mm ≤ H, B ≤ 200 mm \Rightarrow ± 0,8% |
| (D, B and H) ⁽⁴⁾ | and max value of ±10mm | 1 | H, B > 200 mm \Rightarrow ± 0,6% |
| | for D ≤ 406,4 mm: | | T ≤ 5 mm ⇒ ± 10% |
| This large (T) | $T \le 5 \text{ mm} \Rightarrow \pm 10\%$ | | $T > 5 \text{ mm} \Rightarrow \pm 0.5 \text{ mm}$ |
| Thickness (T) | $T > 5 \text{ mm} \Rightarrow \pm 0.5 \text{mm}$ for D > 406.4 mm | | 1 > 3 11111 -> 10 , 3 11111 |
| | ± 10% with max valu | ie of + 2mm | |
| | | itch proportion of diameter to | |
| | thickness lower than 100 | (1), where the roundness | |
| Roundness deviation (O) | deviation is calculated for the formula: | | |
| Roundiness deviation (6) | | | |
| | O(%)=- | $\frac{\max - D \min}{D} *100$ | |
| | | | Max. 0,8% with minimum value of 0,5mm, using the |
| | | | formula: |
| Concavity / Convexity | | | x1 x1 |
| $(x_1, x_2)^{(2)}$ | | | $\frac{xl}{R}*100\%; \frac{xl}{H}*100\%;$ etc. |
| | | | В Н |
| Squareness of side (θ) | - | | 90° ± 1° |
| | | | T ≤ 6 mm ⇒ 1,6T ÷ 2,4T |
| Corner radius | - | | 6 < T ≤10 ⇒ 2,0T ÷ 3,0T |
| (C1, C2 or R) | | | 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⁾ | | < 6000mm | ⇒ 0; + 5 mm |
| | Exact lengths | 6000mm ≤ L ≤10000mm | ⇒ 0; + 15mm |
| | | > 10000mm | ⇒ 0; + 5 mm + 1mm/m |
| | Approximate lengths | > 4000mm | \Rightarrow 0; + 50 mm |
| ¹ . When the proportion D | D/T > 100, then the roundr | ness deviation shell be agreed. | |
| ² . The tolerance of conve | exity and concavity is inde | pendent of the external dimens | ions` tolerances. |
| 3. At the stage of inquiry | or order, the manufacture | r shell agrees the specific type | of length and length range or length. |

- At the stage of inquiry or order, the manufacturer shell agrees the specific type of length and length range or length.
- Dimensional measures will be made at the distance of at least 100 mm from the end of the hollow section.