# Welded tubes

Our welded tubes are characterized by high concentricity and good measurement accuracy.

## WELDED COLD FORMED CONSTRUCTION TUBE

Welded, cold formed circular construction tube manufactured in accordance with EN 10219-1 in quality S235JRH especially suitable for hot dip galvanizing.

## **PRODUCT INFORMATION**

| ARTICLE NO. | OD    | WALL | KG/M | LENGTH |
|-------------|-------|------|------|--------|
| 10322       | 26.90 | 2.60 | 1.56 | 6000   |
| 10339       | 33.70 | 2.60 | 1.99 | 6000   |
| 10340       | 33.70 | 3.20 | 2.41 | 6000   |
| 10341       | 33.70 | 4.00 | 2.93 | 6000   |
| 10391       | 42.40 | 2.60 | 2.55 | 6000   |
| 10392       | 42.40 | 3.20 | 3.09 | 6000   |
| 10405       | 48.30 | 2.60 | 2.93 | 6000   |
| 10408       | 48.30 | 3.20 | 3.56 | 6000   |
| 10562       | 60.30 | 2.90 | 4.11 | 6000   |
| 10563       | 60.30 | 3.60 | 5.03 | 6000   |
| 10568       | 63.50 | 2.90 | 4.33 | 6000   |
| 10569       | 70.00 | 2.90 | 4.80 | 6000   |
| 10586       | 70.00 | 4.00 | 6.51 | 6000   |
| 10608       | 76.10 | 2.90 | 5.24 | 6000   |
| 10610       | 76.10 | 3.60 | 6.44 | 6000   |
| 10613       | 76.10 | 4.00 | 7.11 | 6000   |
| 10663       | 82.50 | 3.20 | 6.26 | 6000   |

| ARTICLE NO. | OD     | WALL | KG/M  | LENGTH |
|-------------|--------|------|-------|--------|
| 10665       | 88.90  | 3.20 | 6.76  | 6000   |
| 10812       | 101.60 | 3.60 | 8.70  | 6000   |
| 10825       | 114.30 | 3.60 | 9.83  | 6000   |
| 247577      | 121.00 | 4.00 | 11.50 | 6000   |
| 212957      | 127.00 | 4.00 | 12.10 | 6000   |
| 100470      | 133.00 | 4.00 | 12.70 | 6000   |
| 247910      | 139.70 | 4.00 | 13.40 | 6000   |
| 247908      | 152.40 | 4.50 | 16.40 | 6000   |
| 247909      | 159.00 | 4.50 | 17.10 | 6000   |
| 10994       | 168.30 | 4.50 | 18.20 | 6000   |
| 247921      | 177.80 | 5.00 | 21.30 | 6000   |
| 247907      | 177.80 | 8.00 | 33.50 | 6000   |
| 11011       | 193.70 | 4.00 | 18.70 | 6000   |
| 11017       | 193.70 | 5.60 | 26.00 | 6000   |
| 11042       | 219.10 | 6.30 | 33.10 | 6000   |
| 11051       | 244.50 | 6.30 | 37.00 | 12000  |
| 11073       | 273.00 | 6.30 | 41.40 | 12000  |

# **CHEMICAL PROPERTIES**

Norm SS EN 10219-1, steelgrade S235JRH. The table below applies to material with wall thickness  $\leq$  40 mm. Chemical composition in percentage weight max (Al=min).

| STEEL GRADE | C%   | Si%  | Mn% | Р%    | <b>S</b> % | N%    |
|-------------|------|------|-----|-------|------------|-------|
| S235JRH     | 0.17 | 0.04 | 1.4 | 0.045 | 0.045      | 0.009 |

The tube is suitable for hot dip galvanizing

# **MECHANICAL CHARACTERISTICS**

The table below is for information only. For a complete presentation, refer to the standard.

| YIELD STRENGTH MPa |      | l MPa WALL (MM)      | TENSILE STRENGTH MPa WALL (MM) |           | EXTENSION      | IMPACT STRENGTH (J) |        |
|--------------------|------|----------------------|--------------------------------|-----------|----------------|---------------------|--------|
| STEEL GRADE        | ≤ 16 | > 16 <u>&lt; 4</u> 0 | < 3                            | ≥3 ≤ 40   | <u>&lt;</u> 40 | TEST TEMP.          | ENERGY |
| S235JRH            | 235  | 225                  | 360 - 510                      | 340 - 470 | 24             | 20                  | 27     |

## **MEASUREMENT DEVIATIONS**

Tolerance for external diameter (D) and wall thickness (T).

| CHARACTERISTICS     | CIRCULAR CONSTRUCTION TUBE (D)   |  |  |
|---------------------|--|--|--|
| Outer dimension (D) | <u>+</u> 1% with min   |  |  |
|                     | $\pm$ 0,5 mm and max $\pm$ 10 mm   |  |  |
| Wall thickness (T)  | For D ≤ 406.4  |  |  |
|                     | T ≤ 5 mm ± 10 %  |  |  |
|                     | $T > 5$ mm $\pm 0.5$ mm  |  |  |
|                     | For D > 406.4 mm   |  |  |
|                     | 10% but no more than +/- 2 mm  |  |  |
| Roundness (O)       | 2% for construction tubes with diameter in relation to thickness, not exceeding 100* |  |  |
| Straightness        | 0.2% of whole length and 3mm over 1m length  |  |  |
| Weight              | + 6 % on individual lengths  |  |  |

<sup>\*</sup>When the diameter in relation to the thickness exceeds 199, the tolerance for deviation from roundness must be agreed upon.

