

EN 10255

- Production Standard of EN 10255
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- Chemical Composition of EN 10255
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● Production Standard of EN 10255

● EN 10255

The EN 10255 standard is a European standard that helps to ensure the safety and quality of non-alloy steel tubes that are welded or threaded. This standard includes a variety of choices for finishing tube ends and coatings, which helps to protect the tubing from damage during transport and use. The EN 10255 standard also specifies the minimum wall thickness for each type of tubing, which helps to prevent weak or damaged tubing from being used in construction projects. In addition, the tubes shall be manufactured by a seamless (S) or longitudinally welded (W) process. By following this standard, manufacturers can help to ensure that their products meet the highest quality standards.

● Dimensions and Sizes of EN 10255

| Nominal Bore | | Outside Diameter | | Thickness | | | Weight | | |
|--------------|----|------------------|---------------|-----------|--------|-------|--------|--------|-------|
| | | Light | Medium/ Heavy | Light | Medium | Heavy | Light | Medium | Heavy |
| Inch | mm | mm | mm | mm | mm | mm | kg/m | kg/m | kg/m |
| 1/4 | 8 | 13.6 | 13.9 | 1.8 | 2.3 | 2.9 | 0.515 | 0.641 | 0.765 |
| 3/8 | 10 | 17.1 | 17.4 | 1.8 | 2.3 | 2.9 | 0.67 | 0.839 | 1.02 |

| | | | | | | | | | |
|------|-----|-------|-------|-----|-----|-----|-------|------|------|
| 1/2 | 15 | 21.4 | 21.7 | 2 | 2.6 | 3.2 | 0.947 | 1.21 | 1.44 |
| 3/4 | 20 | 26.9 | 27.2 | 2.3 | 2.6 | 3.2 | 1.38 | 1.56 | 1.87 |
| 1 | 25 | 33.8 | 34.2 | 2.6 | 3.2 | 4 | 1.98 | 2.41 | 2.94 |
| 1.25 | 32 | 42.5 | 42.9 | 2.6 | 3.2 | 4 | 2.54 | 3.1 | 3.8 |
| 1.5 | 40 | 48.4 | 48.8 | 2.9 | 3.2 | 4 | 3.23 | 3.57 | 4.38 |
| 2 | 50 | 60.2 | 60.8 | 2.9 | 3.6 | 4.5 | 4.08 | 5.03 | 6.19 |
| 2.5 | 65 | 76 | 76.6 | 3.2 | 3.6 | 4.5 | 5.71 | 6.43 | 7.93 |
| 3 | 80 | 88.7 | 89.5 | 3.2 | 4 | 5 | 6.72 | 8.37 | 10.3 |
| 4 | 100 | 113.9 | 114.9 | 3.6 | 4.5 | 5.4 | 9.75 | 12.2 | 14.5 |
| 5 | 125 | | 140.6 | | 5 | 5.4 | | 16.6 | 17.9 |
| 6 | 150 | | 165.1 | | 5 | 5.4 | | 19.7 | 21.3 |

●Chemical Composition of EN 10255

| Grade | Chemical composition (%) | | | |
|-------|--------------------------|--------|---------|---------|
| | C | Mn | P | S |
| S195T | ≤ 0.20 | ≤ 1.40 | ≤ 0.035 | ≤ 0.030 |

●Mechanical Properties Tensile Strength and Yield Strength of EN 10255

| Grade | Mechanical Properties | | |
|-------|-----------------------|------------------------|----------------|
| | Yield Strength (Mpa) | Tensile Strength (Mpa) | Elongation (%) |
| S195T | 195 | 320-520 | 20 |

●Tolerances of EN10255 Piping

- Type L - Dimension Tolerance and Unit Mass

| Specified Outside Diameter a D | Designation of Thread a R | Outside Diameter | | Wall Thickness T | Mass per Unit Length of Bare Tube | |
|-----------------------------------|---------------------------|------------------|-------|------------------|-----------------------------------|-----------------------|
| | | max. | min. | | Plain End | Threaded and Socketed |
| (mm) | — | (mm) | (mm) | (mm) | (kg/m) | (kg/m) |
| 13.5 | 1/4 | 13.9 | 13.2 | 2 | 0.567 | 0.571 |
| 17.2 | 3/8 | 17.4 | 16.7 | 2 | 0.75 | 0.756 |
| 21.3 | 1/2 | 21.7 | 21 | 2.3 | 1.08 | 1.09 |
| 26.9 | 3/4 | 27.1 | 26.4 | 2.3 | 1.4 | 1.41 |
| 33.7 | 1 | 34 | 33.2 | 2.9 | 2.2 | 2.22 |
| 42.4 | 1.25 | 42.7 | 41.9 | 2.9 | 2.82 | 2.85 |
| 48.3 | 1.5 | 48.6 | 47.8 | 2.9 | 3.25 | 3.29 |
| 60.3 | 2 | 60.7 | 59.6 | 3.2 | 4.51 | 4.58 |
| 76.1 | 2.5 | 76 | 75.2 | 3.2 | 5.75 | 5.87 |
| 88.9 | 3 | 88.7 | 87.9 | 3.2 | 6.76 | 6.93 |
| 101.6 | 3.5 | 101.2 | 100.3 | 3.6 | 8.7 | 8.88 |
| 114.3 | 4 | 113.9 | 113 | 3.6 | 9.83 | 10.1 |
| 139.7 | 5 | 140.8 | 138.5 | 4.5 | 15 | 15.5 |
| 165.1 | 6 | 166.5 | 163.9 | 4.5 | 17.8 | 18.4 |

a For relationship between specified outside diameter (D), thread size (R) and nominal diameter (DN), see Annex A. T = specified wall thickness.

- Type L1 - Dimension Tolerance and Unit Mass

| Specified Outside Diameter a D | Designation of Thread a R | Outside Diameter | | Wall Thickness T | Mass per Unit Length of Bare Tube | |
|-----------------------------------|---------------------------|------------------|------|------------------|-----------------------------------|-----------------------|
| | | max. | min. | | Plain End | Threaded and Socketed |
| (mm) | — | (mm) | (mm) | (mm) | (kg/m) | (kg/m) |
| 13.5 | 1/4 | 13.9 | 13.2 | 2 | 0.57 | 0.574 |
| 17.2 | 3/8 | 17.4 | 16.7 | 2 | 0.742 | 0.748 |
| 21.3 | 1/2 | 21.7 | 21 | 2.3 | 1.08 | 1.09 |
| 26.9 | 3/4 | 27.1 | 26.4 | 2.3 | 1.39 | 1.4 |
| 33.7 | 1 | 34 | 33.2 | 2.9 | 2.2 | 2.22 |
| 42.4 | 1.25 | 42.7 | 41.9 | 2.9 | 2.82 | 2.85 |
| 48.3 | 1.5 | 48.6 | 47.8 | 2.9 | 3.24 | 3.28 |
| 60.3 | 2 | 60.7 | 59.6 | 3.2 | 4.49 | 4.56 |
| 76.1 | 2.5 | 76.3 | 75.2 | 3.2 | 5.73 | 5.85 |
| 88.9 | 3 | 89.4 | 87.9 | 3.6 | 7.55 | 7.72 |
| 114.3 | 4 | 114.9 | 113 | 4 | 10.8 | 11.1 |

a For relationship between specified outside diameter (D), thread size (R) and nominal diameter (DN), see Annex A. T = specified wall thickness.

- Type L2 - Dimension Tolerance and Unit Mass

| Specified Outside Diameter a D | Designation of Thread a R | Outside Diameter | | Wall Thickness T | Mass per Unit Length of Bare Tube | |
|-----------------------------------|---------------------------|------------------|------|------------------|-----------------------------------|-----------------------|
| | | max. | min. | | Plain End | Threaded and Socketed |
| (mm) | — | (mm) | (mm) | (mm) | (kg/m) | (kg/m) |

| | | | | | | |
|-------|------|-------|------|-----|-------|-------|
| 13.5 | 1/4 | 13.6 | 13.2 | 1.8 | 0.515 | 0.519 |
| 17.2 | 3/8 | 17.1 | 16.7 | 1.8 | 0.67 | 0.676 |
| 21.3 | 1/2 | 21.4 | 21 | 2 | 0.947 | 0.956 |
| 26.9 | 3/4 | 26.9 | 26.4 | 2.3 | 1.38 | 1.49 |
| 33.7 | 1 | 33.8 | 33.2 | 2.6 | 1.98 | 2 |
| 42.4 | 1.25 | 42.5 | 41.9 | 2.6 | 2.54 | 2.57 |
| 48.3 | 1.5 | 48.4 | 47.8 | 2.9 | 3.23 | 3.27 |
| 60.3 | 2 | 60.2 | 59.6 | 2.9 | 4.08 | 4.15 |
| 76.1 | 2.5 | 76 | 75.2 | 3.2 | 5.71 | 5.83 |
| 88.9 | 3 | 88.7 | 87.9 | 3.2 | 6.72 | 6.89 |
| 114.3 | 4 | 113.9 | 113 | 3.6 | 9.75 | 10 |

a For relationship between specified outside diameter (D), thread size (R) and nominal diameter (DN), see Annex A. T = specified wall thickness.