

Steel Tube Sizing Chart

Quick Reference Guide

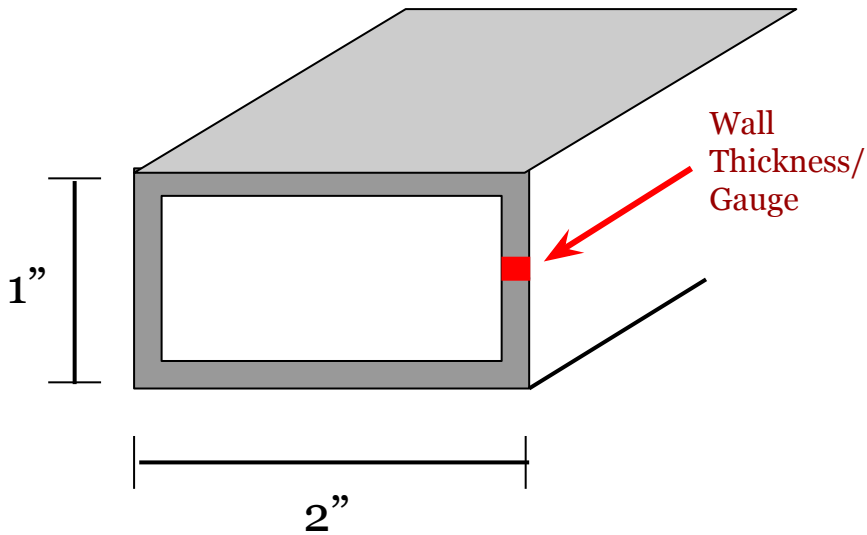
McHone  **Industries**

Contract Metal Manufacturing

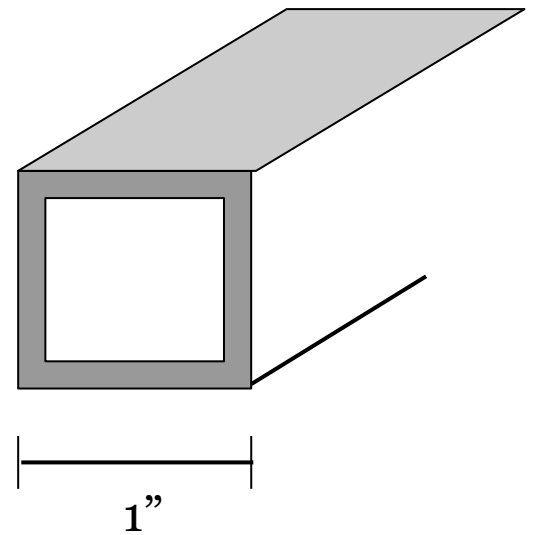
Established 1974

Standard Tube Shapes

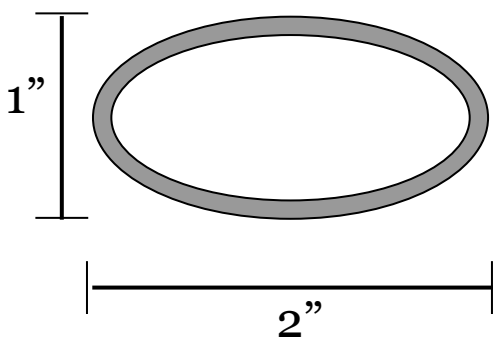
As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.



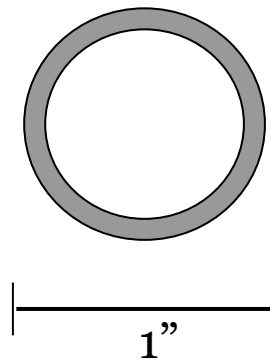
Rectangular



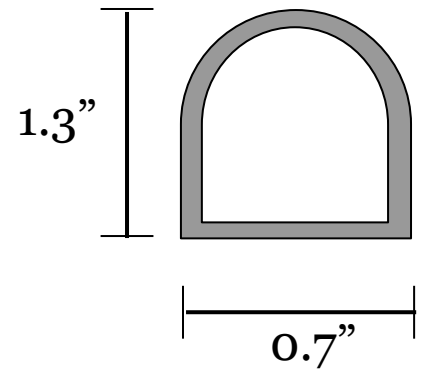
Square



Oval



Round



"D" Tube

Outer Dimension / Outer Diameter - Measures the length and width of the tube from the outside of the wall rather than the inside.

Wall Thickness / Gauge - Two ways of measuring the thickness of the tube's wall. Wall thickness is commonly measured in inches or millimeters, while gauge is a standard integer. e.g. 0.049 inch wall thickness = 18 gauge

Weight - Measured in pounds per foot; indicates heaviness of a tube with that specific outer dimension and gauge.

Weight & Density

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

Density

Mild Carbon Steel - 0.284 pounds per cubic inch (**lb/in³**)

304 Stainless Steel - 0.289 lb/in³

6061 Aluminum - 0.098 lb/in³

Calculating Tube Weights

O.D. - Outer Diameter

W.T. - Wall Thickness

LS - Long Side

SS - Short Side

Mild Carbon Steel

Round Tubing: 10.700 x (O.D. - W.T.) x W.T.

Square: 13.630 x (O.D. - W.T.) x W.T. (Diameter measured across the flats)

Rectangular: 13.630 x [(LS + SS / 2) - W.T.] x W.T.

304 Stainless Steel

Round Tubing: 10.930 x (O.D. - W.T.) x W.T.

Square: 13.920 x (O.D. - W.T.) x W.T. (Diameter measured across the flats)

Rectangular: 13.920 x [(LS + SS / 2) - W.T.] x W.T.

6061 Aluminum

Round Tubing: 3.690 x (O.D. - W.T.) x W.T.

Square: 4.704 x (O.D. - W.T.) x W.T. (Diameter measured across the flats)

Rectangular: 4.704 x [(LS + SS / 2) - W.T.] x W.T.

Round Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) | Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|--------------------------|----------------|-------------------------|
| 0.500 | 22 gauge | 0.020 | 1.000 | 22 gauge | 0.020 |
| | 20 gauge | 0.030 | | 20 gauge | 0.030 |
| | 18 gauge | 0.049 | | 18 gauge | 0.049 |
| | 16 gauge | 0.065 | | 16 gauge | 0.065 |
| 0.625 | 22 gauge | 0.020 | 1.090 | 14 gauge | 0.083 |
| | 20 gauge | 0.030 | | 22 gauge | 0.020 |
| | 18 gauge | 0.049 | | 20 gauge | 0.030 |
| | 16 gauge | 0.065 | | 18 gauge | 0.049 |
| 0.750 | 22 gauge | 0.020 | 1.125 | 16 gauge | 0.065 |
| | 20 gauge | 0.030 | | 14 gauge | 0.083 |
| | 18 gauge | 0.049 | | 22 gauge | 0.020 |
| | 16 gauge | 0.065 | | 20 gauge | 0.030 |
| 0.875 | 22 gauge | 0.020 | 1.190 | 18 gauge | 0.049 |
| | 20 gauge | 0.030 | | 16 gauge | 0.065 |
| | 18 gauge | 0.049 | | 14 gauge | 0.083 |
| | 16 gauge | 0.065 | | 22 gauge | 0.025 |
| 0.946 | 22 gauge | 0.020 | 1.190 | 20 gauge | 0.030 |
| | 20 gauge | 0.030 | | 18 gauge | 0.049 |
| | 18 gauge | 0.049 | | 16 gauge | 0.065 |
| | 16 gauge | 0.065 | | 14 gauge | 0.083 |
| | 14 gauge | 0.083 | | | |

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Round Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) | Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) | |
|--------------------------|----------------|-------------------------|--------------------------|----------------|-------------------------|----------|
| 1.225 | 22 gauge | 0.025 | 1.575 (40mm) | 20 gauge | 0.035 | |
| | 20 gauge | 0.030 | | 18 gauge | 0.049 | |
| | 18 gauge | 0.049 | | 16 gauge | 0.065 | |
| | 16 gauge | 0.065 | | 14 gauge | 0.083 | |
| | 14 gauge | 0.083 | | 1.625 | 20 gauge | 0.035 |
| 1.250 | 22 gauge | 0.025 | 18 gauge | | 0.049 | |
| | 20 gauge | 0.030 | 16 gauge | | 0.065 | |
| | 18 gauge | 0.049 | 14 gauge | | 0.083 | |
| | 16 gauge | 0.065 | 2.000 | | 18 gauge | 0.042 |
| | 14 gauge | 0.083 | | 16 gauge | 0.065 | |
| 1.312 | 20 gauge | 0.030 | | 14 gauge | 0.083 | |
| | 18 gauge | 0.049 | | 2.460 | 18 gauge | 0.049 |
| | 16 gauge | 0.065 | | | 16 gauge | 0.065 |
| | 14 gauge | 0.083 | 14 gauge | | 0.083 | |
| | 1.500 | 20 gauge | 0.030 | | 2.500 | 18 gauge |
| 18 gauge | | 0.049 | 16 gauge | | | 0.065 |
| 16 gauge | | 0.065 | 14 gauge | 0.083 | | |
| 14 gauge | | 0.083 | | | | |
| | | | | | | |

Square Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) | Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|--------------------------|----------------|-------------------------|
| 0.500 | 22 gauge | 0.020 | 1.000 | 22 gauge | 0.025 |
| | 20 gauge | 0.035 | | 20 gauge | 0.035 |
| | 18 gauge | 0.049 | | 18 gauge | 0.049 |
| | 16 gauge | 0.065 | | 16 gauge | 0.065 |
| 0.625 | 22 gauge | 0.020 | 1.250 | 14 gauge | 0.083 |
| | 20 gauge | 0.035 | | 20 gauge | 0.035 |
| | 18 gauge | 0.049 | | 18 gauge | 0.049 |
| | 16 gauge | 0.065 | | 16 gauge | 0.065 |
| 0.750 | 22 gauge | 0.020 | 1.500 | 14 gauge | 0.083 |
| | 20 gauge | 0.035 | | 20 gauge | 0.035 |
| | 18 gauge | 0.049 | | 18 gauge | 0.049 |
| | 16 gauge | 0.065 | | 16 gauge | 0.065 |
| 0.812 | 22 gauge | 0.020 | 2.000 | 18 gauge | 0.049 |
| | 20 gauge | 0.035 | | 16 gauge | 0.065 |
| | 18 gauge | 0.049 | | 14 gauge | 0.083 |
| | 16 gauge | 0.065 | | 16 gauge | 0.065 |
| | 14 gauge | 0.083 | | 14 gauge | 0.083 |

Rectangular Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|
| 0.530 x 1.030 | 22 gauge | 0.029 |
| | 20 gauge | 0.035 |
| | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 0.750 x 1.000 | 22 gauge | 0.029 |
| | 20 gauge | 0.035 |
| | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 0.500 x 1.250 | 22 gauge | 0.029 |
| | 20 gauge | 0.035 |
| | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 0.870 x 1.975 | 20 gauge | 0.065 |
| | 18 gauge | 0.083 |
| | 16 gauge | 0.049 |
| | 14 gauge | 0.065 |

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Rectangular Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|
| 1.000 x 1.500 | 20 gauge | 0.035 |
| | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 1.000 x 2.000 | 20 gauge | 0.035 |
| | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 1.500 x 2.000 | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 1.964 x 1.181 | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 2.105 x 1.000 | 18 gauge | 0.049 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |

Oval Tubing

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|
| 0.787 x 1.345 | 22 gauge | 0.025 |
| | 20 gauge | 0.030 |
| | 18 gauge | 0.042 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |
| 0.875 x 1.500 | 20 gauge | 0.030 |
| | 18 gauge | 0.042 |
| | 16 gauge | 0.065 |
| | 14 gauge | 0.083 |

“D” Tubing

| Outer Dimension (inches) | Gauge (inches) | Wall Thickness (inches) |
|--------------------------|----------------|-------------------------|
| 0.787 x 1.345 | 22 gauge | 0.025 |
| | 20 gauge | 0.030 |
| | 18 gauge | 0.042 |

For full information on welded steel tube ASTM standards and testing, see the [ASTM A554 Specification Sheet](#).

For more information on metal tube sizing and weights, please [call or email us](#) at McHone Industries.

As long as the tube dimensions are 2" x 2" or under, we can manufacture any shape you need.

