## 1. ASME B36.19M - Stainless Steel Pipe: Wall Thickness & Theoretical Weight

Each schedule cell shows nominal wall thickness (mm, top) and theoretical weight (kg/m, bottom) for Grade 304 / 304L. NPS 1/8 - 24.

| NPS (in) | DN | OD (mm) | Sch 5S | Sch 10S | Sch 40S | Sch 80S |
|---|---|---|---|---|---|---|
| | | | t (mm) / kg/m | t (mm) / kg/m | t (mm) / kg/m | t (mm) / kg/m |
| 1/8 | 6 | 10.3 | -<br>- | 1.24<br>0.28 | 1.73<br>0.37 | 2.41<br>0.47 |
| 1/4 | 8 | 13.7 | -<br>- | 1.65<br>0.50 | 2.24<br>0.64 | 3.02<br>0.80 |
| 3/8 | 10 | 17.1 | -<br>- | 1.65<br>0.64 | 2.31<br>0.85 | 3.20<br>1.11 |
| 1/2 | 15 | 21.3 | 1.65<br>0.81 | 2.11<br>1.01 | 2.77<br>1.28 | 3.73<br>1.63 |
| 3/4 | 20 | 26.7 | 1.65<br>1.03 | 2.11<br>1.29 | 2.87<br>1.70 | 3.91<br>2.22 |
| 1 | 25 | 33.4 | 1.65<br>1.30 | 2.77<br>2.11 | 3.38<br>2.53 | 4.55<br>3.27 |
| 1-1/4 | 32 | 42.2 | 1.65<br>1.67 | 2.77<br>2.72 | 3.56<br>3.43 | 4.85<br>4.51 |
| 1-1/2 | 40 | 48.3 | 1.65<br>1.92 | 2.77<br>3.14 | 3.68<br>4.09 | 5.08<br>5.47 |
| 2 | 50 | 60.3 | 1.65<br>2.41 | 2.77<br>3.97 | 3.91<br>5.49 | 5.54<br>7.56 |
| 2-1/2 | 65 | 73.0 | 2.11<br>3.73 | 3.05<br>5.31 | 5.16<br>8.72 | 7.01<br>11.52 |
| 3 | 80 | 88.9 | 2.11<br>4.56 | 3.05<br>6.52 | 5.49<br>11.41 | 7.62<br>15.43 |
| 3-1/2 | 90 | 101.6 | 2.11<br>5.23 | 3.05<br>7.49 | 5.74<br>13.71 | 8.08<br>18.82 |
| 4 | 100 | 114.3 | 2.11<br>5.90 | 3.05<br>8.45 | 6.02<br>16.24 | 8.56<br>22.55 |
| 5 | 125 | 141.3 | 2.77<br>9.56 | 3.40<br>11.68 | 6.55<br>21.99 | 9.53<br>31.28 |
| 6 | 150 | 168.3 | 2.77<br>11.42 | 3.40<br>13.97 | 7.11<br>28.55 | 10.97<br>42.99 |
| 8 | 200 | 219.1 | 2.77<br>14.93 | 3.76<br>20.17 | 8.18<br>42.98 | 12.70<br>65.30 |
| 10 | 250 | 273.1 | 3.40<br>22.84 | 4.19<br>28.07 | 9.27<br>60.92 | 12.70<br>82.38 |
| 12 | 300 | 323.9 | 3.96<br>31.56 | 4.57<br>36.35 | 9.53<br>74.63 | 12.70<br>98.45 |
| 14 | 350 | 355.6 | 3.96<br>34.69 | 4.78<br>41.77 | 9.53<br>82.15 | 12.70<br>108.48 |
| 16 | 400 | 406.4 | 4.19<br>41.98 | 4.78<br>47.82 | 9.53<br>94.21 | 12.70<br>124.55 |
| 18 | 450 | 457.2 | 4.19<br>47.28 | 4.78<br>53.87 | 9.53<br>106.27 | 12.70<br>140.62 |
| 20 | 500 | 508.0 | 4.78<br>59.92 | 5.54<br>69.34 | 9.53<br>118.33 | 12.70<br>156.69 |
| 22 | 550 | 558.8 | 4.78<br>65.97 | 5.54<br>76.35 | 9.53<br>130.39 | 12.70<br>172.76 |
| 24 | 600 | 609.6 | 5.54<br>83.36 | 6.35<br>95.42 | 9.53<br>142.45 | 12.70<br>188.83 |

**Weight basis:** W (kg/m) = 0.02491 x t x (OD - t), OD and t in mm, density 7.93 g/cm3 (304/304L). For 316/316L (7.98 g/cm3) multiply the listed weight by **1.0064**. Weight is theoretical for plain-end pipe; tolerances, end finish and coatings are excluded. "-" = schedule not defined for that NPS.

## 2. ASME B36.10M - Wrought Steel Pipe: Wall Thickness

Nominal wall thickness for carbon / alloy steel pipe across the full schedule range. All dimensions in millimetres; "-" = not defined.

| NPS (in) | DN | OD (mm) | Sch 10 | Sch 20 | Sch 30 | STD | Sch 40 | Sch 60 | XS | Sch 80 | Sch 100 | Sch 120 | Sch 140 | Sch 160 | XXS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/8 | 6 | 10.3 | - | - | - | 1.73 | 1.73 | - | 2.41 | 2.41 | - | - | - | - | - |
| 1/4 | 8 | 13.7 | - | - | - | 2.24 | 2.24 | - | 3.02 | 3.02 | - | - | - | - | - |
| 3/8 | 10 | 17.1 | - | - | - | 2.31 | 2.31 | - | 3.20 | 3.20 | - | - | - | - | - |
| 1/2 | 15 | 21.3 | - | - | - | 2.77 | 2.77 | - | 3.73 | 3.73 | - | - | - | 4.78 | 7.47 |
| 3/4 | 20 | 26.7 | - | - | - | 2.87 | 2.87 | - | 3.91 | 3.91 | - | - | - | 5.56 | 7.82 |
| 1 | 25 | 33.4 | - | - | - | 3.38 | 3.38 | - | 4.55 | 4.55 | - | - | - | 6.35 | 9.09 |
| 1-1/4 | 32 | 42.2 | - | - | - | 3.56 | 3.56 | - | 4.85 | 4.85 | - | - | - | 6.35 | 9.70 |
| 1-1/2 | 40 | 48.3 | - | - | - | 3.68 | 3.68 | - | 5.08 | 5.08 | - | - | - | 7.14 | 10.15 |
| 2 | 50 | 60.3 | - | - | - | 3.91 | 3.91 | - | 5.54 | 5.54 | - | - | - | 8.74 | 11.07 |
| 2-1/2 | 65 | 73.0 | - | - | - | 5.16 | 5.16 | - | 7.01 | 7.01 | - | - | - | 9.53 | 14.00 |
| 3 | 80 | 88.9 | - | - | - | 5.49 | 5.49 | - | 7.62 | 7.62 | - | - | - | 11.13 | 15.24 |
| 3-1/2 | 90 | 101.6 | - | - | - | 5.74 | 5.74 | - | 8.08 | 8.08 | - | - | - | - | - |
| 4 | 100 | 114.3 | - | - | - | 6.02 | 6.02 | - | 8.56 | 8.56 | - | 11.13 | - | 13.49 | 17.12 |
| 5 | 125 | 141.3 | - | - | - | 6.55 | 6.55 | - | 9.53 | 9.53 | - | 12.70 | - | 15.88 | 19.05 |
| 6 | 150 | 168.3 | - | - | - | 7.11 | 7.11 | - | 10.97 | 10.97 | - | 14.27 | - | 18.26 | 21.95 |
| 8 | 200 | 219.1 | - | 6.35 | 7.04 | 8.18 | 8.18 | 10.31 | 12.70 | 12.70 | 15.09 | 18.26 | 20.62 | 23.01 | 22.23 |
| 10 | 250 | 273.1 | - | 6.35 | 7.80 | 9.27 | 9.27 | 12.70 | 12.70 | 15.09 | 18.26 | 21.44 | 25.40 | 28.58 | 25.40 |
| 12 | 300 | 323.9 | - | 6.35 | 8.38 | 9.53 | 10.31 | 14.27 | 12.70 | 17.48 | 21.44 | 25.40 | 28.58 | 33.32 | 25.40 |
| 14 | 350 | 355.6 | 6.35 | 7.92 | 9.53 | 9.53 | 11.13 | 15.09 | 12.70 | 19.05 | 23.83 | 27.79 | 31.75 | 35.71 | - |
| 16 | 400 | 406.4 | 6.35 | 7.92 | 9.53 | 9.53 | 12.70 | 16.66 | 12.70 | 21.44 | 26.19 | 30.96 | 36.53 | 40.49 | - |
| 18 | 450 | 457.2 | 6.35 | 7.92 | 11.13 | 9.53 | 14.27 | 19.05 | 12.70 | 23.83 | 29.36 | 34.96 | 39.67 | 45.24 | - |
| 20 | 500 | 508.0 | 6.35 | 9.53 | 12.70 | 9.53 | 15.09 | 20.62 | 12.70 | 26.19 | 32.54 | 38.10 | 44.45 | 50.01 | - |
| 22 | 550 | 558.8 | 6.35 | 9.53 | 12.70 | 9.53 | - | 22.23 | 12.70 | 28.58 | 34.93 | 41.28 | 47.63 | 53.98 | - |
| 24 | 600 | 609.6 | 6.35 | 9.53 | 14.27 | 9.53 | 17.48 | 24.61 | 12.70 | 30.96 | 38.89 | 46.02 | 52.37 | 59.54 | - |

**Notes - B36.10M:** (1) STD = Standard, XS = Extra Strong, XXS = Double Extra Strong. (2) STD equals Sch 40 and XS equals Sch 80 only for NPS 1/8-10 (STD) and NPS 1/8-8 (XS); above these sizes the values differ. (3) Higher schedule = thicker wall = smaller bore; OD is unchanged. (4) Schedule numbers are nominal designations, not direct thickness values.

## 3. ASME B36.10M - Carbon Steel Pipe: Theoretical Weight (kg/m)

Theoretical weight per metre for carbon steel pipe (density 7.85 g/cm3), mapped to the same schedules as the table on page 2.

| NPS (in) | DN | OD (mm) | Sch 10 | Sch 20 | Sch 30 | STD | Sch 40 | Sch 60 | XS | Sch 80 | Sch 100 | Sch 120 | Sch 140 | Sch 160 | XXS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1/8 | 6 | 10.3 | - | - | - | 0.37 | 0.37 | - | 0.47 | 0.47 | - | - | - | - | - |
| 1/4 | 8 | 13.7 | - | - | - | 0.63 | 0.63 | - | 0.80 | 0.80 | - | - | - | - | - |
| 3/8 | 10 | 17.1 | - | - | - | 0.84 | 0.84 | - | 1.10 | 1.10 | - | - | - | - | - |
| 1/2 | 15 | 21.3 | - | - | - | 1.27 | 1.27 | - | 1.62 | 1.62 | - | - | - | 1.95 | 2.55 |
| 3/4 | 20 | 26.7 | - | - | - | 1.69 | 1.69 | - | 2.20 | 2.20 | - | - | - | 2.90 | 3.64 |
| 1 | 25 | 33.4 | - | - | - | 2.50 | 2.50 | - | 3.24 | 3.24 | - | - | - | 4.24 | 5.45 |
| 1-1/4 | 32 | 42.2 | - | - | - | 3.39 | 3.39 | - | 4.47 | 4.47 | - | - | - | 5.61 | 7.77 |
| 1-1/2 | 40 | 48.3 | - | - | - | 4.05 | 4.05 | - | 5.41 | 5.41 | - | - | - | 7.25 | 9.55 |
| 2 | 50 | 60.3 | - | - | - | 5.44 | 5.44 | - | 7.48 | 7.48 | - | - | - | 11.11 | 13.44 |
| 2-1/2 | 65 | 73.0 | - | - | - | 8.63 | 8.63 | - | 11.41 | 11.41 | - | - | - | 14.92 | 20.37 |
| 3 | 80 | 88.9 | - | - | - | 11.29 | 11.29 | - | 15.27 | 15.27 | - | - | - | 21.35 | 27.68 |
| 3-1/2 | 90 | 101.6 | - | - | - | 13.57 | 13.57 | - | 18.63 | 18.63 | - | - | - | - | - |
| 4 | 100 | 114.3 | - | - | - | 16.07 | 16.07 | - | 22.32 | 22.32 | - | 28.32 | - | 33.54 | 41.03 |
| 5 | 125 | 141.3 | - | - | - | 21.77 | 21.77 | - | 30.97 | 30.97 | - | 40.28 | - | 49.11 | 57.43 |
| 6 | 150 | 168.3 | - | - | - | 28.26 | 28.26 | - | 42.56 | 42.56 | - | 54.20 | - | 67.56 | 79.22 |
| 8 | 200 | 219.1 | - | 33.31 | 36.81 | 42.55 | 42.55 | 53.08 | 64.64 | 64.64 | 75.92 | 90.44 | 100.92 | 111.27 | 107.92 |
| 10 | 250 | 273.1 | - | 41.77 | 51.03 | 60.31 | 60.31 | 81.55 | 81.55 | 96.01 | 114.75 | 133.06 | 155.15 | 172.33 | 155.15 |
| 12 | 300 | 323.9 | - | 49.73 | 65.20 | 73.88 | 79.73 | 108.96 | 97.46 | 132.08 | 159.91 | 186.97 | 208.14 | 238.76 | 186.97 |
| 14 | 350 | 355.6 | 54.69 | 67.90 | 81.33 | 81.33 | 94.55 | 126.71 | 107.39 | 158.10 | 194.96 | 224.65 | 253.56 | 281.70 | - |
| 16 | 400 | 406.4 | 62.64 | 77.83 | 93.27 | 93.27 | 123.30 | 160.12 | 123.30 | 203.53 | 245.56 | 286.64 | 333.19 | 365.36 | - |
| 18 | 450 | 457.2 | 70.60 | 87.75 | 122.43 | 105.21 | 155.87 | 205.83 | 139.21 | 254.67 | 309.76 | 364.02 | 408.45 | 459.59 | - |
| 20 | 500 | 508.0 | 78.55 | 117.15 | 155.12 | 117.15 | 183.42 | 247.83 | 155.12 | 311.17 | 381.53 | 441.49 | 508.11 | 564.81 | - |
| 22 | 550 | 558.8 | 86.51 | 129.08 | 171.03 | 129.08 | - | 294.14 | 171.03 | 373.69 | 451.25 | 526.82 | 600.40 | 671.99 | - |
| 24 | 600 | 609.6 | 94.46 | 141.02 | 209.50 | 141.02 | 255.24 | 355.02 | 186.94 | 441.78 | 547.33 | 639.58 | 719.63 | 807.63 | - |

**Weight basis:** W (kg/m) = 0.02466 x t x (OD - t), OD and t in mm, density 7.85 g/cm3. For alloy steel grades adjust by the ratio of their density to 7.85. Weights are theoretical for plain-end pipe and exclude tolerances, threading, couplings and coatings. "-" = schedule not defined for that NPS.