

C-LOK

C-LOK Instrument Valve Co.,Ltd.

Tubes and pipes



Contents

01 Tubes and Pipes



Tubes and Pipes

Features

- Sizes range from 1/16" to 1 1/2" and 2 mm to 38 mm.
- Marked to indicate material, size, specifications, and heat number.

Material Standards

| Grade | UNS Designation | ASTM | ASME |
|----------|-----------------|-----------|-------|
| 316/316L | S31600/S31603 | A269/A213 | SA213 |
| 304/304L | S31400/S31403 | | |
| 321 | S32100 | | |

Tubing allowable working pressure is calculated at -20 to 100°F(-28 to 37°C) using allowable stress value of 20,000 psi according to ASME B31.3 Process Piping code.

Pressure calculations are based on maximum O.D. and minimum wall thickness and no allowance is made for corrosion and erosion. i.e., ASTM A269 1/2 in. OD \times 0.035 in. WT: OD tolerance \pm 0.005 in., WT tolerance \pm 15%. Calculations are based on 0.505 in. OD \times 0.0298 in. WT.

Safety Factor is 3.75 to 1, considering ultimate tensile strength of 75,000psi.

To determine working pressure of ASME B31.1 Power piping Code, multiply the ASME 31.3 rating by 0.94,

Allowable Working Pressure Fractional Tubing

| Tube O.D. in. | Nominal Wall Thickness, in. | | | | | | | | | | | | | | | | |
|---|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 0.010 | 0.012 | 0.014 | 0.016 | 0.020 | 0.028 | 0.035 | 0.049 | 0.065 | 0.083 | 0.095 | 0.109 | 0.120 | 0.134 | 0.156 | 0.188 | |
| | Working Pressure, psig | | | | | | | | | | | | | | | | |
| Note: For gas service, select a tube thickness outside of the shaded area | | | | | | | | | | | | | | | | | |
| 1/16 | 5660 | 6870 | 8180 | 9490 | 12100 | | | | | | | | | | | | |
| 1/8 | | | | | | 8580 | 11000 | | | | | | | | | | |
| 3/16 | | | | | | 5450 | 7070 | 10300 | | | | | | | | | |
| 1/4 | | | | | | 4040 | 5150 | 7570 | 10300 | | | | | | | | |
| 5/16 | | | | | | | 4040 | 5860 | 8080 | | | | | | | | |
| 3/8 | | | | | | | 3330 | 4850 | 5860 | | | | | | | | |
| 1/2 | | | | | | | 2420 | 3530 | 4750 | 6260 | | | | | | | |
| 5/8 | | | | | | | | 2930 | 4040 | 5250 | 6060 | | | | | | |
| 3/4 | | | | | | | | 2420 | 3330 | 4240 | 4950 | 5860 | | | | | |
| 7/8 | | | | | | | | 2020 | 2830 | 3640 | 4240 | 4850 | | | | | |
| 1 | | | | | | | | | 2420 | 3130 | 3640 | 4240 | 4750 | | | | |
| 1 1/4 | | | | | | | | | | 2420 | 2830 | 3330 | 3640 | 4310 | 5250 | | |
| 1 1/2 | | | | | | | | | | | 2320 | 2730 | 3030 | 3430 | 4040 | 4950 | |

Metric Tubing

| Tube O.D. mm | Nominal Wall Thickness, mm | | | | | | | | | | | | | | |
|---|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| | 0.8 | 1.0 | 1.2 | 1.5 | 1.8 | 2.0 | 2.2 | 2.5 | 2.8 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | |
| | Working Pressure, bar | | | | | | | | | | | | | | |
| Note: For gas service, select a tube thickness outside of the shaded area | | | | | | | | | | | | | | | |
| 3 | 677 | | | | | | | | | | | | | | |
| 6 | 313 | 424 | 545 | 717 | | | | | | | | | | | |
| 8 | | 313 | 394 | 525 | | | | | | | | | | | |
| 10 | | 242 | 303 | 404 | 515 | 586 | | | | | | | | | |
| 12 | | 202 | 252 | 333 | 414 | 475 | | | | | | | | | |
| 14 | | 162 | 202 | 273 | 343 | 384 | 434 | | | | | | | | |
| 15 | | 151 | 192 | 252 | 313 | 364 | 404 | | | | | | | | |
| 16 | | | 172 | 232 | 293 | 333 | 374 | 404 | | | | | | | |
| 18 | | | 151 | 202 | 263 | 293 | 323 | 374 | | | | | | | |
| 20 | | | 141 | 182 | 232 | 263 | 293 | 333 | 384 | | | | | | |
| 22 | | | 121 | 162 | 202 | 232 | 263 | 303 | 343 | | | | | | |
| 25 | | | | | 182 | 202 | 232 | 263 | 293 | 323 | | | | | |
| 28 | | | | | | 182 | 202 | 232 | 263 | 283 | 333 | | | | |
| 30 | | | | | | 172 | 182 | 212 | 242 | 263 | 313 | | | | |
| 32 | | | | | | 162 | 172 | 202 | 222 | 242 | 293 | 333 | | | |
| 38 | | | | | | | 141 | 162 | 192 | 202 | 242 | 273 | 313 | | |

Note: The allowable working pressures of fractional and metric tubing are based on ANSI/ASME B31.3 for Process Piping.

Fractional Tubing

| Tube O.D. in. | Nominal Thickness in. | Wall Basic Ordering Number | | | | | Weight | |
|---------------|-----------------------|----------------------------|--------------|--------------|--------------|--------------|--------|-------|
| | | 316 | 316L | 304 | 304L | 321 | lb/ft | Kg/m |
| 1/8 | 0.028 | SS-ST2-028- | 6L-ST2-028- | S4-ST2-028- | 4L-ST2-028- | S1-ST2-028- | 0.030 | 0.044 |
| | 0.035 | SS-ST4-035- | 6L-ST4-035- | S4-ST4-035- | 4L-ST4-035- | S1-ST4-035- | 0.082 | 0.122 |
| 1/4 | 0.049 | SS-ST4-049- | 6L-ST4-049- | S4-ST4-049- | 4L-ST4-049- | S1-ST4-049- | 0.107 | 0.159 |
| | 0.065 | SS-ST4-065- | 6L-ST4-065- | S4-ST4-065- | 4L-ST4-065- | S1-ST4-065- | 0.131 | 0.194 |
| 3/8 | 0.035 | SS-ST6-035- | 6L-ST6-035- | S4-ST6-035- | 4L-ST6-035- | S1-ST6-035- | 0.129 | 0.192 |
| | 0.049 | SS-ST6-049- | 6L-ST6-049- | S4-ST6-049- | 4L-ST6-049- | S1-ST6-049- | 0.173 | 0.258 |
| 1/2 | 0.065 | SS-ST6-065- | 6L-ST6-065- | S4-ST6-065- | 4L-ST6-065- | S1-ST6-065- | 0.219 | 0.326 |
| | 0.035 | SS-ST8-035- | 6L-ST8-035- | S4-ST8-035- | 4L-ST8-035- | S1-ST8-035- | 0.177 | 0.263 |
| 5/8 | 0.049 | SS-ST8-049- | 6L-ST8-049- | S4-ST8-049- | 4L-ST8-049- | S1-ST8-049- | 0.240 | 0.357 |
| | 0.065 | SS-ST8-065- | 6L-ST8-065- | S4-ST8-065- | 4L-ST8-065- | S1-ST8-065- | 0.307 | 0.457 |
| 1 | 0.065 | SS-ST10-065- | 6L-ST10-065- | S4-ST10-065- | 4L-ST10-065- | S1-ST10-065- | 0.396 | 0.589 |
| 3/4 | 0.065 | SS-ST12-065- | 6L-ST12-065- | S4-ST12-065- | 4L-ST12-065- | S1-ST12-065- | 0.484 | 0.720 |
| 1 | 0.083 | SS-ST16-083- | 6L-ST16-083- | S4-ST16-083- | 4L-ST16-083- | S1-ST16-083- | 0.827 | 1.231 |
| 1 1/4 | 0.109 | SS-ST20-109- | 6L-ST20-109- | S4-ST20-109- | 4L-ST20-109- | S1-ST20-109- | 1.352 | 2.012 |
| 1 1/2 | 0.134 | SS-ST24-134- | 6L-ST24-134- | S4-ST24-134- | 4L-ST24-134- | S1-ST24-134- | 2.989 | 2.961 |

Metric Tubing

| Tube O.D. mm | Nominal Thickness mm | Wall Basic Ordering Number | | | | | Weight | |
|--------------|----------------------|----------------------------|---------------|---------------|---------------|---------------|--------|--|
| | | 316 | 316L | 304 | 304L | 321 | Kg/m | |
| 3 | 0.5 | SS-STM3-0.5- | 6L-STM3-0.5- | S4-STM3-0.5- | 4L-STM3-0.5- | S1-STM3-0.5- | 0.031 | |
| | 0.7 | SS-STM3-0.7- | 6L-STM3-0.7- | S4-STM3-0.7- | 4L-STM3-0.7- | S1-STM3-0.7- | 0.404 | |
| 6 | 1.0 | SS-STM6-1.0- | 6L-STM6-1.0- | S4-STM6-1.0- | 4L-STM6-1.0- | S1-STM6-1.0- | 0.125 | |
| | 1.5 | SS-STM6-1.5- | 6L-STM6-1.5- | S4-STM6-1.5- | 4L-STM6-1.5- | S1-STM6-1.5- | 0.169 | |
| 8 | 1.0 | SS-STM8-1.0- | 6L-STM8-1.0- | S4-STM8-1.0- | 4L-STM8-1.0- | S1-STM8-1.0- | 0.175 | |
| | 1.5 | SS-STM8-1.5- | 6L-STM8-1.5- | S4-STM8-1.5- | 4L-STM8-1.5- | S1-STM8-1.5- | 0.244 | |
| 10 | 1.0 | SS-STM10-1.0- | 6L-STM10-1.0- | S4-STM10-1.0- | 4L-STM10-1.0- | S1-STM10-1.0- | 0.226 | |
| | 1.5 | SS-STM10-1.5- | 6L-STM10-1.5- | S4-STM10-1.5- | 4L-STM10-1.5- | S1-STM10-1.5- | 0.320 | |
| 12 | 1.0 | SS-STM12-1.0- | 6L-STM12-1.0- | S4-STM12-1.0- | 4L-STM12-1.0- | S1-STM12-1.0- | 0.276 | |
| | 1.5 | SS-STM12-1.5- | 6L-STM12-1.5- | S4-STM12-1.5- | 4L-STM12-1.5- | S1-STM12-1.5- | 0.395 | |
| 14 | 2.0 | SS-STM12-2.0- | 6L-STM12-2.0- | S4-STM12-2.0- | 4L-STM12-2.0- | S1-STM12-2.0- | 0.501 | |
| | 1.0 | SS-STM14-1.0- | 6L-STM14-1.0- | S4-STM14-1.0- | 4L-STM14-1.0- | S1-STM14-1.0- | 0.326 | |
| 16 | 1.5 | SS-STM14-1.5- | 6L-STM14-1.5- | S4-STM14-1.5- | 4L-STM14-1.5- | S1-STM14-1.5- | 0.470 | |
| | 2.0 | SS-STM14-2.0- | 6L-STM14-2.0- | S4-STM14-2.0- | 4L-STM14-2.0- | S1-STM14-2.0- | 0.602 | |
| 18 | 1.0 | SS-STM16-1.0- | 6L-STM16-1.0- | S4-STM16-1.0- | 4L-STM16-1.0- | S1-STM16-1.0- | 0.376 | |
| | 1.5 | SS-STM16-1.5- | 6L-STM16-1.5- | S4-STM16-1.5- | 4L-STM16-1.5- | S1-STM16-1.5- | 0.545 | |
| 20 | 2.0 | SS-STM16-2.0- | 6L-STM16-2.0- | S4-STM16-2.0- | 4L-STM16-2.0- | S1-STM16-2.0- | 0.702 | |
| | 1.0 | SS-STM18-1.0- | 6L-STM18-1.0- | S4-STM18-1.0- | 4L-STM18-1.0- | S1-STM18-1.0- | 0.426 | |
| 22 | 1.5 | SS-STM18-1.5- | 6L-STM18-1.5- | S4-STM18-1.5- | 4L-STM18-1.5- | S1-STM18-1.5- | 0.620 | |
| | 2.0 | SS-STM18-2.0- | 6L-STM18-2.0- | S4-STM18-2.0- | 4L-STM18-2.0- | S1-STM18-2.0- | 0.802 | |
| 25 | 2.0 | SS-STM20-2.0- | 6L-STM20-2.0- | S4-STM20-2.0- | 4L-STM20-2.0- | S1-STM20-2.0- | 0.903 | |
| | 2.0 | SS-STM22-2.0- | 6L-STM22-2.0- | S4-STM22-2.0- | 4L-STM22-2.0- | S1-STM22-2.0- | 1.003 | |
| 28 | 2.0 | SS-STM25-2.0- | 6L-STM25-2.0- | S4-STM25-2.0- | 4L-STM25-2.0- | S1-STM25-2.0- | 1.153 | |
| | 2.5 | SS-STM25-2.5- | 6L-STM25-2.5- | S4-STM25-2.5- | 4L-STM25-2.5- | S1-STM25-2.5- | 1.410 | |
| 30 | 2.8 | SS-STM28-2.8- | 6L-STM28-2.8- | S4-STM28-2.8- | 4L-STM28-2.8- | S1-STM28-2.8- | 1.769 | |
| | 3.0 | SS-STM30-3.0- | 6L-STM30-3.0- | S4-STM30-3.0- | 4L-STM30-3.0- | S1-STM30-3.0- | 2.031 | |
| 32 | 3.5 | SS-STM32-3.5- | 6L-STM32-3.5- | S4-STM32-3.5- | 4L-STM32-3.5- | S1-STM32-3.5- | 2.501 | |
| | 4.0 | SS-STM38-4.0- | 6L-STM38-4.0- | S4-STM38-4.0- | 4L-STM38-4.0- | S1-STM38-4.0- | 3.410 | |

Add the actual foot (feet)/meter (meters) as a suffix to the basic ordering number to get the complete ordering number.
 For example: 12 feet length, outside diameter 1/2 in., wall thickness 0.049 in., 316L SS seamless tube, the complete ordering number is 6L-ST8-049-12.
 4 meters length, outside diameter 1/2 in., wall thickness 0.049 in., 316L SS seamless tube, the complete ordering number is 6L-ST8-049-4M.
 2 meters length, outside diameter 12 mm, wall thickness 1.0 mm, 316L SS seamless tube, the complete ordering number is 6L-STM12-1.0-2M.

Features

- Nominal pipe sizes from 1/8" to 2".
- Marked to indicate material, size, specifications, and heat number.

Material Standards

| Grade | UNS Designation | ASTM | ASME |
|----------|-----------------|------|-------|
| 316/316L | S31600/S31603 | A212 | SA212 |
| 304/304L | S31400/S31403 | | |
| 321 | S32100 | | |

Allowable Working Pressure

| Nominal Pipe Size | Schedule Number (ASME B36.19M) | | | |
|-------------------|--------------------------------|------------|------------|------------|
| | 5S | 10S | 40S | 80S |
| | Working Pressure, psig (bar) | | | |
| 1/8 | / | 3950 (272) | 5750 (397) | 8700 (600) |
| 1/4 | / | 3960 (273) | 5620 (387) | 8130 (560) |
| 3/8 | / | 3110 (215) | 4540 (313) | 6660 (459) |
| 1/2 | 2470 (170) | 3220 (222) | 4370 (301) | 6190 (427) |
| 3/4 | 1960 (135) | 2540 (175) | 3550 (245) | 5040 (348) |
| 1 | 1550 (107) | 2680 (185) | 3330 (229) | 4650 (320) |
| 1 1/4 | 1230 (85) | 2110 (146) | 2760 (190) | 3890 (268) |
| 1 1/2 | 1070 (74) | 1830 (126) | 2460 (170) | 3520 (243) |
| 2 | 840 (58) | 1430 (99) | 2060 (142) | 2990 (206) |

Note: The allowable working pressures are based on ANSI/ASME B31.3 for Process Piping.

Ordering Information

| Nominal Pipe Size | Schedule Number | Basic Ordering Number | | | | | Weight | |
|-------------------|-----------------|-----------------------|--------------|--------------|--------------|--------------|--------|-------|
| | | 316 | 316L | 304 | 304L | 321 | lb/ft | Kg/m |
| 1/8 | 40S | SS-SP2-40S- | 6L-SP2-40S- | S4-SP2-40S- | 4L-SP2-40S- | S1-SP2-40S- | 0.250 | 0.372 |
| | 80S | SS-SP2-80S- | 6L-SP2-80S- | S4-SP2-80S- | 4L-SP2-80S- | S1-SP2-80S- | 0.321 | 0.478 |
| 1/4 | 40S | SS-SP4-40S- | 6L-SP4-40S- | S4-SP4-40S- | 4L-SP4-40S- | S1-SP4-40S- | 0.433 | 0.645 |
| | 80S | SS-SP4-80S- | 6L-SP4-80S- | S4-SP4-80S- | 4L-SP4-80S- | S1-SP4-80S- | 0.546 | 0.812 |
| 3/8 | 40S | SS-SP6-40S- | 6L-SP6-40S- | S4-SP6-40S- | 4L-SP6-40S- | S1-SP6-40S- | 0.579 | 0.862 |
| | 80S | SS-SP6-80S- | 6L-SP6-80S- | S4-SP6-80S- | 4L-SP6-80S- | S1-SP6-80S- | 0.754 | 1.122 |
| 1/2 | 40S | SS-SP8-40S- | 6L-SP8-40S- | S4-SP8-40S- | 4L-SP8-40S- | S1-SP8-40S- | 0.868 | 1.292 |
| | 80S | SS-SP8-80S- | 6L-SP8-80S- | S4-SP8-80S- | 4L-SP8-80S- | S1-SP8-80S- | 1.110 | 1.652 |
| 3/4 | 40S | SS-SP12-40S- | 6L-SP12-40S- | S4-SP12-40S- | 4L-SP12-40S- | S1-SP12-40S- | 1.154 | 1.717 |
| | 80S | SS-SP12-80S- | 6L-SP12-80S- | S4-SP12-80S- | 4L-SP12-80S- | S1-SP12-80S- | 1.504 | 2.238 |
| 1 | 40S | SS-SP16-40S- | 6L-SP16-40S- | S4-SP16-40S- | 4L-SP16-40S- | S1-SP16-40S- | 1.713 | 2.549 |
| | 80S | SS-SP16-80S- | 6L-SP16-80S- | S4-SP16-80S- | 4L-SP16-80S- | S1-SP16-80S- | 2.216 | 3.297 |
| 1 1/4 | 40S | SS-SP20-40S- | 6L-SP20-40S- | S4-SP20-40S- | 4L-SP20-40S- | S1-SP20-40S- | 2.319 | 3.450 |
| | 80S | SS-SP20-80S- | 6L-SP20-80S- | S4-SP20-80S- | 4L-SP20-80S- | S1-SP20-80S- | 3.057 | 4.549 |
| 1 1/2 | 40S | SS-SP24-40S- | 6L-SP24-40S- | S4-SP24-40S- | 4L-SP24-40S- | S1-SP24-40S- | 2.773 | 4.126 |
| | 80S | SS-SP24-80S- | 6L-SP24-80S- | S4-SP24-80S- | 4L-SP24-80S- | S1-SP24-80S- | 3.705 | 5.513 |
| 2 | 40S | SS-SP32-40S- | 6L-SP32-40S- | S4-SP32-40S- | 4L-SP32-40S- | S1-SP32-40S- | 3.727 | 5.546 |
| | 80S | SS-SP32-80S- | 6L-SP32-80S- | S4-SP32-80S- | 4L-SP32-80S- | S1-SP32-80S- | 5.123 | 7.624 |

Add the actual foot (feet)/meter (meters) as a suffix to the basic ordering number to get the complete ordering number.
 For example: 12 feet length, nominal pipe size 1/2 in., pipe schedule 40S, 316 SS seamless pipe, the complete ordering number is SS-SP8-40S-12.
 2 meters length, nominal pipe size 1/2 in., pipe schedule 40S, 316 SS seamless pipe, the complete ordering number is SS-SP8-40S-2M.

Weld Stainless Steel Tubing Allowable Working Pressure

To determine the working pressure of weld tubing to the requirements of ASME B31.3 Code, de-rating factors below must be applied. For single weld tubing multiply by 0.80, and for double weld tubing multiply by 0.85.

Example: SS316 seamless 1/2 in. O.D. x 0.065 in. WT allowable working pressure: 4700 psi.

To determine the work pressure of the single weld tubing, multiply 4700 psi by 0.80. 4700 psig x 0.80=3760 psig at -20 to 100°F (-28 to 37°C).

Tubes and Pipes

Pipe Dimension

| Nominal Pipe Size | Outside Diameter mm | Schedule Number | | | | | | | | | | | | | | | | | |
|-------------------|---------------------|----------------------------|-------|-------|-------|--------|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | 5S | 5 | 10S | 10 | 20 | 30 | 40S | 40 | STD | 60 | 80S | 80 | XS | 100 | 120 | 140 | 160 | XXS |
| | | Nominal Wall Thickness, mm | | | | | | | | | | | | | | | | | |
| 1/8 | 10.287 | | 0.889 | 1.245 | 1.245 | | 1.448 | 1.727 | 1.727 | 1.727 | | 2.413 | 2.413 | 2.413 | | | | | |
| 1/4 | 13.716 | | 1.245 | 1.651 | 1.651 | | 1.854 | 2.235 | 2.235 | 2.235 | | 3.023 | 3.023 | 3.023 | | | | | |
| 3/8 | 17.145 | | 1.245 | 1.651 | 1.651 | | 1.854 | 2.311 | 2.311 | 2.311 | | 3.200 | 3.200 | 3.200 | | | | | |
| 1/2 | 21.336 | 1.651 | 1.651 | 2.108 | 2.108 | | 2.413 | 2.769 | 2.769 | 2.769 | | 3.734 | 3.734 | 3.734 | | | | 4.750 | 7.468 |
| 3/4 | 26.670 | 1.651 | 1.651 | 2.108 | 2.108 | | 2.413 | 2.870 | 2.870 | 2.870 | | 3.912 | 3.912 | 3.912 | | | | 5.537 | 7.823 |
| 1 | 33.401 | 1.651 | 1.651 | 2.769 | 2.769 | | 2.900 | 3.378 | 3.378 | 3.378 | | 4.547 | 4.547 | 4.547 | | | | 6.350 | 9.093 |
| 1 1/4 | 42.164 | 1.651 | 1.651 | 2.769 | 2.769 | | 2.972 | 3.556 | 3.556 | 3.556 | | 4.851 | 4.851 | 4.851 | | | | 6.350 | 9.703 |
| 1 1/2 | 48.260 | 1.651 | 1.651 | 2.769 | 2.769 | | 3.175 | 3.683 | 3.683 | 3.683 | | 5.080 | 5.080 | 5.080 | | | | 7.137 | 10.160 |
| 2 | 60.325 | 1.651 | 1.651 | 2.769 | 2.769 | | 3.175 | 3.912 | 3.912 | 3.912 | | 5.537 | 5.537 | 5.537 | | | | 8.738 | 11.074 |
| 2 1/2 | 73.025 | 2.108 | 2.108 | 3.048 | 3.048 | | 4.775 | 5.156 | 5.156 | 5.156 | | 7.010 | 7.010 | 7.010 | | | | 9.525 | 14.021 |
| 3 | 88.900 | 2.108 | 2.108 | 3.048 | 3.048 | | 4.775 | 5.486 | 5.486 | 5.486 | | 7.620 | 7.620 | 7.620 | | | | 11.125 | 15.240 |
| 3 1/2 | 101.600 | 2.108 | 2.108 | 3.048 | 3.048 | | 4.775 | 5.740 | 5.740 | 5.740 | | 8.077 | 8.077 | 8.077 | | | | | 16.154 |
| 4 | 114.300 | 2.108 | 2.108 | 3.048 | 3.048 | | 4.775 | 6.020 | 6.020 | 6.020 | | 8.560 | 8.560 | 8.560 | | 11.125 | | 13.487 | 17.120 |
| 4 1/2 | 127.000 | | | | | | | 6.274 | | | | 9.017 | | 9.017 | | | | | |
| 5 | 141.300 | 2.769 | 2.769 | 3.404 | 3.404 | | | 6.553 | 6.553 | 6.553 | | 9.525 | 9.525 | 9.525 | | 12.700 | | 15.875 | 19.050 |
| 6 | 168.275 | 2.769 | 2.769 | 3.404 | 3.404 | | | 7.112 | 7.112 | 7.112 | | 10.973 | 10.973 | 10.973 | | 14.275 | | 18.263 | 21.946 |
| 7 | 193.675 | | | | | | | 7.645 | | | | 12.700 | | 12.700 | | | | | 22.225 |
| 8 | 219.075 | 2.769 | 2.769 | 3.759 | 3.759 | 6.350 | 7.036 | 8.179 | 8.179 | 8.179 | 10.312 | 12.700 | 12.700 | 12.700 | 15.088 | 18.263 | 20.625 | 23.012 | 22.225 |
| 9 | 244.475 | | | | | | | 8.687 | | | | 12.700 | | 12.700 | | | | | |
| 10 | 273.050 | 3.404 | 3.404 | 4.191 | 4.191 | 6.350 | 7.798 | 9.271 | 9.271 | 9.271 | 12.700 | 12.700 | 15.088 | 12.700 | 18.263 | 21.438 | 25.400 | 28.575 | 25.400 |
| 11 | 298.450 | | | | | | | 9.525 | | | | 12.700 | | 12.700 | | | | | |
| 12 | 323.850 | 3.962 | 4.191 | 4.572 | 4.572 | 6.350 | 8.382 | 9.525 | 10.312 | 9.525 | 14.275 | 12.700 | 17.475 | 12.700 | 21.438 | 25.400 | 28.575 | 33.325 | 25.400 |
| 14 | 355.600 | 3.962 | | 4.775 | 6.350 | 7.925 | 9.525 | 9.525 | 11.125 | 9.525 | 15.088 | 12.700 | 19.050 | 12.700 | 23.825 | 27.788 | 31.750 | 35.712 | |
| 16 | 406.400 | 4.191 | | 4.775 | 6.350 | 7.925 | 9.525 | 9.525 | 12.700 | 9.525 | 16.662 | 12.700 | 21.438 | 12.700 | 26.187 | 30.963 | 36.525 | 40.488 | |
| 18 | 457.200 | 4.191 | | 4.775 | 6.350 | 7.925 | 11.125 | 9.525 | 14.275 | 9.525 | 19.050 | 12.700 | 23.825 | 12.700 | 29.362 | 34.925 | 39.675 | 45.237 | |
| 20 | 508.000 | 4.775 | | 5.537 | 6.350 | 9.525 | 12.700 | 9.525 | 15.088 | 9.525 | 20.625 | 12.700 | 26.187 | 12.700 | 32.537 | 38.100 | 44.450 | 50.013 | |
| 22 | 558.800 | 4.775 | 4.775 | 5.537 | 6.350 | 9.525 | 12.700 | | | 9.525 | 22.225 | | 28.575 | 12.700 | 34.925 | 41.275 | 47.625 | 53.975 | |
| 24 | 609.600 | 5.537 | | 6.350 | 6.350 | 9.525 | 14.275 | 9.525 | 17.475 | 9.525 | 24.613 | 12.700 | 30.963 | 12.700 | 38.887 | 46.025 | 52.375 | 59.538 | |
| 26 | 660.400 | | | | 7.925 | 12.700 | | | | 9.525 | | | | 12.700 | | | | | |
| 28 | 711.200 | | | | 7.925 | 12.700 | 15.875 | | | 9.525 | | | | 12.700 | | | | | |
| 30 | 762.000 | 6.350 | 6.350 | 7.925 | 7.925 | 12.700 | 15.875 | | | 9.525 | | | | 12.700 | | | | | |
| 32 | 812.800 | | | | 7.925 | 12.700 | 15.875 | | 17.475 | 9.525 | | | | 12.700 | | | | | |
| 34 | 863.600 | | | | 7.925 | 12.700 | 15.875 | | 17.475 | 9.525 | | | | 12.700 | | | | | |
| 36 | 914.400 | | | | 7.925 | 12.700 | 15.875 | | 19.050 | 9.525 | | | | 12.700 | | | | | |

Note: The schedule numbers of 5S, 10S, 40S, and 80S comply with ASME B36.19M. The others comply with ASME B36.10M.