



**To ASTM A312 – 82 :  
Seamless and Welded  
Austenitic Stainless  
Steel Pipe**

## Piping

Grades: 304L and 316L



| Nominal Bore | Schedule | Size in mm<br>OD x W.T. | ID    | Theoretical Mass<br>kg/m |
|--------------|----------|-------------------------|-------|--------------------------|
| 6 mm 1/4"    | 10       | 13,72 x 1,65            | 10,42 | 0,491                    |
| 6 mm 1/4"    | 40       | 13,72 x 2,24            | 9,25  | 0,632                    |
| 6 mm 1/4"    | 80       | 13,72 x 3,02            | 7,67  | 0,796                    |
| 10 mm 3/8"   | 10       | 17,15 x 1,65            | 13,84 | 0,630                    |
| 10 mm 3/8"   | 40       | 17,15 x 2,31            | 12,52 | 0,845                    |
| 10 mm 3/8"   | 80       | 17,15 x 3,20            | 10,74 | 1,099                    |
| 15 mm 1/2"   | 10       | 21,34 x 2,11            | 17,12 | 0,998                    |
| 15 mm 1/2"   | 40       | 21,34 x 2,77            | 15,80 | 1,266                    |
| 15 mm 1/2"   | 80       | 21,34 x 3,73            | 13,87 | 1,619                    |
| 20 mm 3/4"   | 10       | 26,67 x 2,11            | 22,45 | 1,276                    |
| 20 mm 3/4"   | 40       | 26,67 x 2,87            | 20,93 | 1,683                    |
| 20 mm 3/4"   | 80       | 26,67 x 3,91            | 18,85 | 2,194                    |
| 25 mm 1"     | 10       | 33,40 x 2,77            | 27,86 | 2,089                    |
| 25 mm 1"     | 40       | 33,40 x 3,38            | 26,64 | 2,498                    |
| 25 mm 1"     | 80       | 33,40 x 4,55            | 24,30 | 3,232                    |
| 32 mm 1 1/4" | 10       | 42,16 x 2,77            | 36,62 | 2,687                    |
| 32 mm 1 1/4" | 40       | 42,16 x 3,56            | 35,05 | 3,382                    |
| 32 mm 1 1/4" | 80       | 42,16 x 4,85            | 32,46 | 4,460                    |
| 40 mm 1 1/2" | 10       | 48,26 x 2,77            | 42,72 | 3,103                    |
| 40 mm 1 1/2" | 40       | 48,26 x 3,68            | 40,90 | 4,044                    |
| 40 mm 1 1/2" | 80       | 48,26 x 5,08            | 38,10 | 5,403                    |
| 50 mm 2"     | 10       | 60,33 x 2,77            | 54,79 | 3,925                    |
| 50 mm 2"     | 40       | 60,33 x 3,91            | 52,51 | 5,436                    |
| 50 mm 2"     | 80       | 60,33 x 5,54            | 49,25 | 7,473                    |
| 65 mm 2,5"   | 10       | 73,02 x 3,04            | 66,95 | 5,25                     |
| 65 mm 2,5"   | 40       | 73,02 x 5,15            | 62,72 | 8,62                     |
| 80 mm 3"     | 10       | 88,90 x 3,05            | 82,80 | 6,446                    |
| 80 mm 3"     | 40       | 88,90 x 5,49            | 77,92 | 11,27                    |
| 80 mm 3"     | 80       | 88,90 x 7,62            | 73,66 | 15,25                    |

| Nominal Bore | Schedule | Size in mm<br>OD x W.T. | ID     | Theoretical Mass<br>kg/m |
|--------------|----------|-------------------------|--------|--------------------------|
| 95 mm 3 1/2" | 10       | 101,60 x 8,05           | 95,50  | 7,399                    |
| 95 mm 3 1/2" | 40       | 101,60 x 5,74           | 90,12  | 13,55                    |
| 95 mm 3 1/2" | 80       | 101,60 x 8,08           | 85,36  | 18,60                    |
| 100 mm 4"    | 10       | 114,30 x 3,05           | 108,20 | 8,352                    |
| 100 mm 4"    | 40       | 114,30 x 6,02           | 102,26 | 16,06                    |
| 100 mm 4"    | 80       | 114,30 x 8,56           | 97,18  | 22,29                    |
| 125 mm 5"    | 10       | 141,30 x 3,40           | 134,49 | 11,56                    |
| 125 mm 5"    | 40       | 141,30 x 6,55           | 128,20 | 21,75                    |
| 125 mm 5"    | 80       | 141,30 x 9,53           | 122,25 | 30,92                    |
| 150 mm 6"    | 10       | 168,28 x 3,40           | 161,48 | 14,04                    |
| 150 mm 6"    | 40       | 168,28 x 7,11           | 154,05 | 28,23                    |
| 150 mm 6"    | 80       | 168,28 x 10,97          | 146,33 | 42,51                    |
| 200 mm 8"    | 10       | 219,08 x 3,76           | 211,56 | 20,26                    |
| 200 mm 8"    | 20       | 219,08 x 6,35           | 206,38 | 33,81                    |
| 200 mm 8"    | 40       | 219,08 x 8,18           | 202,72 | 42,48                    |
| 200 mm 8"    | 80       | 219,08 x 12,70          | 193,68 | 64,56                    |
| 250 mm 10"   | 10       | 273,05 x 4,19           | 264,67 | 28,20                    |
| 250 mm 10"   | 20       | 273,05 x 6,35           | 260,35 | 42,38                    |
| 250 mm 10"   | 40       | 273,05 x 9,28           | 254,51 | 61,20                    |
| 250 mm 10"   | 80S      | 273,05 x 12,70          | 247,65 | 81,47                    |
| 300 mm 12"   | 10       | 323,85 x 4,58           | 314,71 | 36,53                    |
| 300 mm 12"   | 20       | 323,85 x 6,35           | 311,15 | 50,45                    |
| 300 mm 12"   | 40S      | 323,85 x 9,53           | 304,80 | 74,82                    |
| 300 mm 12"   | 80S      | 323,85 x 12,70          | 298,45 | 98,89                    |
| 350 mm 14"   | 10       | 355,60 x 4,77           | 346,06 | 55,60                    |
| 400 mm 16"   | 10       | 406,40 x 4,77           | 400,46 | 63,57                    |
| 400 mm 16"   | 20       | 406,40 x 6,35           | 393,70 | 79,27                    |
| 450 mm 18"   | 10       | 457,20 x 4,77           | 447,66 | 71,64                    |
| 500 mm 20"   | 10       | 508,00 x 5,54           | 496,92 | 79,72                    |

## Welded round tubing Grades: 304, 316, 3CR12

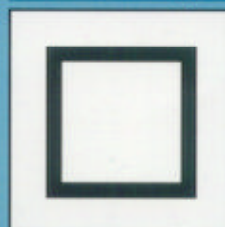
Finishes: 2B, polished



|                |               |
|----------------|---------------|
| 12,7 OD x 1.2  | 38,1 OD x 1.6 |
| 12,7 OD x 1.6  | 38,1 OD x 2.0 |
| 15,9 OD x 1.2  | 41,3 OD x 1.2 |
| 19,05 OD x 1.2 | 41,3 OD x 1.6 |
| 19,05 OD x 1.6 | 44,5 OD x 1.2 |
| 22,23 OD x 1.2 | 44,5 OD x 1.6 |
| 22,23 OD x 1.6 | 47,6 OD x 1.2 |
| 25,40 OD x 1.2 | 47,6 OD x 1.6 |
| 25,40 OD x 1.6 | 50,8 OD x 1.2 |
| 25,40 OD x 2.0 | 50,8 OD x 1.6 |
| 32 OD x 1.2    | 50,8 OD x 2.0 |
| 32 OD x 1.6    | 57,2 OD x 1.6 |
| 34,9 OD x 1.2  | 63,5 OD x 1.6 |
| 34,9 OD x 1.6  | 76,2 OD x 1.6 |

## Welded square tubing Grades: 304, 316, 3CR12

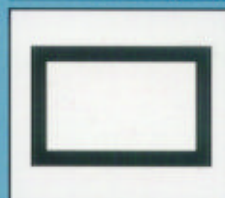
Finishes: 2B, polished



|               |               |
|---------------|---------------|
| 20 x 20 x 1.2 | 30 x 30 x 2.0 |
| 20 x 20 x 1.6 | 40 x 40 x 1.2 |
| 25 x 25 x 1.2 | 40 x 40 x 1.6 |
| 25 x 25 x 1.6 | 40 x 40 x 2.0 |
| 25 x 25 x 2.0 | 50 x 50 x 1.6 |
| 30 x 30 x 1.2 | 50 x 50 x 2.0 |
| 30 x 30 x 1.6 |               |

## Welded rectangular tubing Grades: 304, 316, 3CR12

Finishes: 2B, polished



|               |
|---------------|
| 40 x 20 x 1.2 |
| 40 x 20 x 1.6 |
| 50 x 30 x 1.6 |
| 60 x 40 x 1.6 |
| 60 x 40 x 2.0 |
| 50 x 25 x 1.6 |

## Heat exchanger tubing

ASTM A213 Seamless  
ASTM A249 Welded



|                          | SWG               | 16   | 15   | 14   | 13   | 12   | 11   | 10   | 9    | 8    | 7     | 6     | 5     | 4     |
|--------------------------|-------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
|                          | Nominal thickness | 1.65 | 1.83 | 2.11 | 2.41 | 2.77 | 3.05 | 3.40 | 3.76 | 4.19 | 4.57  | 5.16  | 5.59  | 6.04  |
| Outside Diameter Inch-mm | 5/8" - 15.88      | 0.62 | 0.68 | 0.77 | 0.86 | 0.96 | 1.03 | 1.12 | 1.20 |      |       |       |       |       |
|                          | 3/4" - 19.05      | 0.77 | 0.84 | 0.95 | 1.07 | 1.20 | 1.30 | 1.41 | 1.52 | 1.64 |       |       |       |       |
|                          | 7/8" - 22.22      | 0.91 | 1.00 | 1.13 | 1.28 | 1.44 | 1.56 | 1.71 | 1.85 | 2.00 | 2.12  | 2.32  |       |       |
|                          | 1" - 25.40        | 1.05 | 1.15 | 1.31 | 1.49 | 1.68 | 1.82 | 2.00 | 2.17 | 2.36 | 2.51  | 2.77  |       |       |
|                          | 1 1/4" - 31.75    | 1.33 | 1.47 | 1.67 | 1.90 | 2.16 | 2.34 | 2.59 | 2.82 | 3.08 | 3.30  | 3.66  | 3.88  | 4.11  |
|                          | 1 1/2" - 38.10    | 1.61 | 1.78 | 2.03 | 2.32 | 2.64 | 2.87 | 3.17 | 3.47 | 3.80 | 4.08  | 4.55  | 4.84  | 5.16  |
|                          | 1 3/4" - 44.45    |      | 2.09 | 2.44 | 2.73 | 3.11 | 3.39 | 3.76 | 4.12 | 4.52 | 4.86  | 5.44  | 5.80  | 6.20  |
|                          | 2" - 50.80        |      | 2.41 | 2.75 | 3.15 | 3.59 | 3.92 | 4.35 | 4.77 | 5.24 | 5.64  | 6.34  | 6.77  | 7.23  |
|                          | 2 1/2" - 63.50    |      |      |      |      | 4.55 | 4.96 | 5.52 | 6.07 | 6.68 | 7.21  | 8.12  | 8.69  | 9.32  |
|                          | 3" - 76.20        |      |      |      |      | 5.59 | 6.10 | 6.78 | 7.46 | 8.28 | 9.02  | 10.06 | 10.85 | 11.63 |
|                          | 3 1/2" - 88.90    |      |      |      |      |      | 7.17 | 7.97 | 8.77 | 9.75 | 10.63 | 11.88 | 12.83 | 13.76 |

## Spiral welded tubing Grades: 304, 304L, 316, 316L, 3CR12



| ID    | Range of Wall Thickness (mm) |            |
|-------|------------------------------|------------|
|       | 304/316                      | 3CR12      |
| 84,0  | 1,6 to 2,0                   | 1,6 to 2,0 |
| 88,9  | "                            | "          |
| 103,2 | "                            | "          |
| 104,0 | "                            | "          |
| 106,0 | "                            | "          |
| 107,0 | "                            | "          |
| 114,3 | "                            | "          |
| 127,0 | 1,6 to 3,0                   | "          |
| 129,0 | "                            | "          |
| 134,0 | "                            | "          |
| 153,2 | "                            | "          |
| 154,0 | "                            | "          |
| 156,0 | "                            | "          |
| 159,0 | "                            | "          |
| 168,0 | "                            | 1,6 to 3,0 |
| 204,0 | 1,6 to 4,0                   | "          |
| 205,0 | "                            | "          |
| 209,0 | "                            | "          |
| 210,0 | "                            | "          |

| ID    | Range of Wall Thickness (mm) |            |
|-------|------------------------------|------------|
|       | 304/316                      | 3CR12      |
| 219,1 | 1,6 to 4,0                   | 1,6 to 3,0 |
| 254,0 | 1,6 to 4,5                   | 1,6 to 4,0 |
| 255,0 | "                            | "          |
| 256,0 | "                            | "          |
| 259,0 | "                            | "          |
| 273,0 | "                            | "          |
| 304,0 | 1,6 to 5,0                   | 1,6 to 4,5 |
| 305,0 | "                            | "          |
| 306,0 | "                            | "          |
| 307,0 | "                            | "          |
| 324,0 | "                            | "          |
| 354,0 | "                            | "          |
| 355,6 | "                            | "          |
| 381,0 | "                            | "          |
| 404,0 | "                            | "          |
| 406,0 | "                            | "          |
| 408,0 | "                            | "          |
| 460,0 | "                            | "          |
| 508,0 | "                            | "          |