# MONEL® 400 (NICKEL-COPPER) ANNEALED SEAMLESS TUBING
# ASTM B-165 OR EQUIVALENT

## ALLOWABLE WORKING PRESSURE

ALLOWABLE STRESS = 17,500 PSI between -20° F and 100° F

| | WALL THICKNESS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tubing O.D | .028 | .032 | .035 | .049 | .065 | .083 | .095 | .109 | .120 |
| 1/8 | 6,422 | 9,325 | 11,823 | | | | | | |
| 3/16 | 4,081 | 5,935 | 7,630 | 11,005 | | | | | |
| 1/4 | | 4,305 | 5,518 | 8,053 | 10,946 | | | | |
| 5/16 | | 3,378 | 4,305 | 6,275 | 8,598 | | | | |
| 3/8 | | | 3,530 | 5,107 | 7,029 | | | | |
| 1/2 | | | 2,595 | 3,721 | 5,078 | 6,699 | | | |
| 5/8 | | | 2,051 | 2,927 | 3,970 | 5,200 | 6,056 | | |
| 3/4 | | | 1,696 | 2,412 | 3,259 | 4,249 | 4,933 | 5,755 | 6,422 |
| 7/8 | | | 1,446 | 2,051 | 2,764 | 3,592 | 4,161 | 4,842 | 5,391 |
| 1 | | | 1,260 | 1,784 | 2,399 | 3,111 | 3,598 | 4,179 | 4,646 |

Factor of Safety = 4, considering tensile strength to be 70,000 PSI at room temperature

## CALCULATED BURST PRESSURE

TENSILE STRENGTH = 70,000

| | WALL THICKNESS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tubing O.D | .028 | .032 | .035 | .049 | .065 | .083 | .095 | .109 | .120 |
| 1/8 | 25,690 | 37,300 | 47,290 | | | | | | |
| 3/16 | 16,325 | 23,745 | 30,520 | 44,025 | | | | | |
| 1/4 | | 17,220 | 22,070 | 32,215 | 43,785 | | | | |
| 5/16 | | 13,510 | 17,220 | 25,100 | 34,400 | | | | |
| 3/8 | | | 14,120 | 20,425 | 28,120 | | | | |
| 1/2 | | | 10,380 | 14,890 | 20,315 | 26,795 | | | |
| 5/8 | | | 8,210 | 11,710 | 15,885 | 20,805 | 24,225 | | |
| 3/4 | | | 6,790 | 9,655 | 13,035 | 16,995 | 19,735 | 23,030 | 25,690 |
| 7/8 | | | 5,780 | 8,210 | 11,060 | 14,370 | 16,645 | 19,370 | 21,565 |
| 1 | | | 5,040 | 7,140 | 9,595 | 12,445 | 14,390 | 16,715 | 18,585 |

Reference: ANSI B31.3, Table A-1 and Par. 304.1.2
ASME Pressure Vessels, Section VIII,
Table UNF-23.3, Par. UG-27 and Appendix 1, Par. 1-2