

# Stainless Steel (inc. High Performance) - 1.4404 / 316L

**Tube - Super Mirror Marine**

**Properties**

| Stock   |           |           | Chemical Properties   |                              |
|---------|-----------|-----------|---|------------------------------|
| OD (in) | Wall (mm) | Wt/m (Kg) | Element   | Chemical Composition %       |
| 1/2     | 1.5       | 0.42      | Carbon (C)  | 0.0 - 0.03                   |
| 3/4     | 1.5       | 0.66      | Chromium (Cr)   | 16.50 - 18.50                |
| 7/8     | 1.5       | 0.77      | Molybdenum (Mo)   | 2.0 - 2.5                    |
| 1       | 1.5       | 0.90      | Silicon (Si)  | 0.0 - 1.0                    |
| 1       | 2.0       | 1.17      | Phosphorus (P)  | 0.0 - 0.05                   |
| 1 1/8   | 1.5       | 1.11      | Sulphur (S)   | 0.0 - 0.01                   |
| 30mm    | 2.0       | 1.40      | Nickel (Ni)   | 10.0 - 13.0                  |
| 1 1/4   | 1.5       | 1.14      | Manganese (Mn)  | 0.0 - 2.0                    |
| 1 1/2   | 1.5       | 1.38      | Iron (Fe)   | Balance                      |
| 1 1/2   | 2.0       | 1.81      | Above properties are for 1.4404   |                              |
| 1 1/2   | 3.0       | 2.64      | 1.4404/316L also corresponds to the following designation 316S11        |                              |
| 2       | 1.5       | 1.85      |   |                              |
| 2       | 2.0       | 2.44      |   |                              |
| 2       | 3.0       | 3.59      |   |                              |
| 2 1/2   | 1.5       | 2.33      |   |                              |
|         |           |           | Mechanical Properties   |                              |
|         |           |           | Property  | Value                        |
|         |           |           | Properties below are for 1.4404 (316L) which also corresponds to 316S11 |                              |
|         |           |           | Proof Stress  | 220 min MPa                  |
|         |           |           | Tensile Strength  | 520 - 680 MPa                |
|         |           |           | Elongation A50 mm   | 40% min                      |
|         |           |           | Physical Properties   |                              |
|         |           |           | Property  | Value                        |
|         |           |           | Density   | 8.00 g/cm <sup>3</sup>       |
|         |           |           | Melting Point   | 1400°C                       |
|         |           |           | Thermal Expansion   | 15.9 x 10 <sup>-6</sup> /K   |
|         |           |           | Modulus of Elasticity   | 193 GPa                      |
|         |           |           | Thermal Conductivity  | 16.3 W/m.K                   |
|         |           |           | Electrical Resistivity  | 0.074 x 10 <sup>-6</sup> Ω.m |
|         |           |           | 1.4404/316L also corresponds to the following designation 316S11        |                              |

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