



## 304 Stainless Steel

304 is an austenitic solution treated stainless steel material which has excellent resistance to a wide variety of corrosive environments, making it suitable for many applications where exposure to water, air, or corrosive substances is common. However, it is not as resistant to chloride-induced corrosion (like seawater) compared to some other stainless steel alloys (e.g., 316).

304 stainless steel is a versatile, corrosion-resistant material that can be widely used in a range of applications from kitchenware to industrial equipment.

### 304 Stainless Steel Grades & Equivalents:

- ASTM A193 B8 CLASS 1
- ASTM A320 B8 CLASS 1
- ASTM A276 S30400
- ASTM A479 S30400
- BS4882 B8
- ISO3506 A2-50
- 1.4301
- 1.4304
- 316L \*\*
- BS970 304S11 \*\*
- BS970 304S31

### Typical Chemical Analysis

<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Cr</b>	<b>Ni</b>	<b>Mo</b>
0.080	1.000	2.000	0.045	0.030	18.00-20.00	8.00-11.00	
<b>W</b>	<b>N</b>	<b>Cb/Nb</b>	<b>Ti</b>	<b>Co</b>	<b>Cu</b>	<b>Al</b>	<b>B</b>
<b>V</b>	<b>Fe</b>	<b>Mg</b>	<b>Ta</b>	<b>Ca</b>	<b>O</b>	<b>Bi</b>	<b>Se</b>
<b>Sn</b>	<b>Zn</b>	<b>Pb</b>	<b>Y</b>	<b>Cb/Nb + Ta</b>	<b>Ni + Co</b>	<b>H</b>	<b>PREN</b>

\*\* Carbon content for 304L / BS970 304S11 shall be  $\leq 0.030\%$

### Typical Mechanical Properties

Tensile Strength	515 N/mm <sup>2</sup> min
0.2% Proof Stress	205 N/mm <sup>2</sup> min
Elongation	30%
Reduction of Area	50%
Hardness	223 HBw
Impacts	
Stress Rupture	
Other Remarks	Mechanicals may vary slightly depending on specification (above taken from ASTM A193)

### Product Forms Available:

- Hexagon Head Bolts
- Hexagon Nuts
- Studbolts
- Socket Capscrews
- Socket Countersunk Screws
- Socket Setscrews
- & Many other special fasteners and bespoke machined parts

Products can be produced to customer drawings or relevant British (BS), American (ASME, ANSI), European (DIN, UNI) or International Standards (ISO).

The size ranges M3 to M120 Metric and 3/16" to 4.75" Imperial can be supplied. Thread forms include UNC, UNS, UNF, BSW, BSF, Whitworth, Metric, Metric Fine.



Callywhite Lane  
Dronfield  
Derbyshire  
S18 2XR

T: +44 01246 291111

[www.westspecialfasteners.co.uk](http://www.westspecialfasteners.co.uk)

[sales@westspecialfasteners.co.uk](mailto:sales@westspecialfasteners.co.uk)