



# NESSteel Inc.

83 Gerber Drive, Tolland, CT 06084

800-654-2901 • fax: (860)875-4900

E-mail: [sales@nessteel.com](mailto:sales@nessteel.com)

## 304 Stainless Steel

Type 304 is the most versatile and widely used stainless steel. It is still sometimes referred to by its old name 18/8 which is derived from the nominal composition of type 304 being 18% chromium and 8% nickel.

Type 304 stainless steel is an austenitic grade that can be severely deep drawn. This property has resulted in 304 being the dominant grade used in applications like sinks and saucepans.

Type 304L is the low carbon version of 304. It is used in heavy gauge components for improved weldability. Some products such a plate and pipe may be available as "dual certified: material that meets the criteria for both 304 and 304L.

304H, a high carbon content variant, is also available for use at high temperatures.

Property data given in this document is typical for flat rolled products covered by ASTM A240/A240M. It is reasonable to expect specifications in these standards to be similar but not necessarily identical to those given in this datasheet.

### Applications

304 stainless steel is typically used in:

- Sinks and back splashes
- Saucepans
- Cutlery and flatware
- Architectural paneling
- Sanitary ware and troughs
- Tubing
- Brewery, dairy, food and pharmaceutical production equipment
- Springs, nut, bolts and screws

### Typical Chemical Composition

%	304	304L	304H
C	0.08 max	0.03 max	0.10 max
Mn	2.0	2.0	2.0
Si	0.75	0.75	0.75
P	0.045	0.045	0.045
S	0.03	0.03	0.03
Cr	18-20	18-20	18-20
Ni	10.5	12	10.5
N	0.1	0.1	-

### Typical Mechanical Properties

Grade	304	304L	304H
Tensile Strength (Mpa)	520	500	520
Compression Strength (Mpa)	210	210	210
Proof Stress 0.2% (Mpa)	210	200	210
Elongation A5 (%)	45	45	45
Hardness Rockwell B	92	92	92