



ALLOY PRODEC® TYPE 304/ 304L

AMS 5511 / AMS 5513 / UNS S30403

Products & Sizes

Plate

0.1875" - 3.500"

PRODEC® Type 304/304L Chemical Composition

	Element	Min	Max
C	Carbon	-	0.030
Mn	Manganese	-	2.00
P	Phosphorus	-	0.045
S	Sulfur	-	0.03
Si	Silicon	-	0.75
Cr	Chromium	18.0	20.0
Ni	Nickel	11.0	15.0
Mo	Molybdenum	3.00	4.00
N	Nitrogen	-	0.10

Industry Standards

All of our PRODEC® Type 304/304L plate is ordered to specific decimal thicknesses. Please contact us for more details.

Industry Applications

- Cutting instruments
- Knife blades
- Surgical instruments
- Chisels
- Ball bearing and valves
- Fasteners
- Pressure fittings
- High vacuum processing equipment

Physical Properties

Property	Value
Density	0.285 lb/in ³
Modulus of Elasticity	29 x 10 ⁶ psi
Coefficient of Thermal Expansion	68-212°F, /°F: 8.9 x 10 ⁶
Thermal Conductivity	8.7 Btu/ft hr°F
Heat Capacity	0.12 Btu/lb°F
Electrical Resistivity	33.5 x 10 ⁶ Ω-inch

Mechanical Properties

Hardening

This product cannot be hardened by heat treatment. However, PRODEC® 304/304L can be hardened by cold working.

Heat Treatment - Annealing

PRODEC® Type 304/304L should be heated to 1900°F minimum, then water quenched or rapidly cooled by other means.

The technical data provided is for information only and not for design purposes. It is not warranted or guaranteed

Mechanical Properties of PRODEC® Type 304/304L			
0.375 Inch Plate	Typical	ASTM 304	ASTM 304L
Ultimate Tensile Strength	99	75 min	70 min
0.2% Offset Yield Strength	48	30 min	25 min
Elongation in 2 inches %	52	45 min	40 min
Reduction in Area %	61	-	-
Hardness, Rockwell B	85	96 max	92 max