STAINLESS STEEL Advanced Materials. Engineered for Performance.

904L

Stainless Steel | UNS: N08904 | EN: 1.4539

High alloy austenitic grade with 4-5% molybdenum and copper, bridging the gap between 316L and nickel alloys for sulphuric and phosphoric acid service.



Stock status: Mill indent - Typical lead time: 4 - 8 weeks mill indent

Key features

- Resists reducing and oxidising acids
- Copper-enhanced acid resistance

Available forms & sizes

Form	Size range
Plates	1.5 - 100 mm thk, up to 2500 mm wide
Seamless Pipes & Tubes	1/2" - 24" NB, SCH 5S - SCH 160
Round Bars	6 - 500 mm dia
Flanges	1/2" - 48", 150# - 2500#
Fittings	1/2" - 48", SCH 10S - SCH 160

Chemical composition (%)

Element	Min	Max
C	-	0.020
Cr	19.0	23.0
Ni	23.0	28.0
Mo	4.0	5.0
Cu	1.0	2.0

Mechanical properties

Property	Value	Unit
Yield Strength (0.2%)	220 min	MPa
Tensile Strength	490 min	MPa

Property	Value	Unit
Elongation	35 min	%

Physical properties

Property	Value	Unit
Density	8.0	g/cm3
PREN	36	-

Standards

ASTM B625, ASTM B673, EN 10088-2

Equivalent grades

1.4539, N08904, Uranus B6

Industries served

Chemical Processing, Fertiliser, Pulp & Paper

Typical applications

- Sulphuric acid plant equipment
- Flue gas scrubbers
- Seawater handling
- Phosphoric acid service

Live datasheet