

Stainless Steel AISI 302,304,304L (Austenitic)

General Information

AISI 302 and 304 balls are for applications where material toughness and resistance to corrosion are more important than hardness. They have good corrosion resistance to the food environment, oxidising solutions and most organic chemicals. Applications are Valves, Aerosol and Finger Pumps. Corrosion resistance is higher after annealing and passivation. Not resistant to sulphuric acids.

International Equivalents

DIN X5 CR Ni 18.09, JIS SUS 304, W 1.4301

Composition	302	304	304L
C	0.12% Max	0.08% Max	0.03% Max
Cr	17 - 19%	18 - 20%	18 - 20%
Ni	8 - 11%	8 - 10.5%	8 - 10.5%
Si	1.0% Max	1.0% Max	1.0% Max
Mo	1.0% Max	-	-
Mn	2.0% Max	2.0% Max	2.0% Max
P	0.045% Max	0.045% Max	0.045% Max
S	0.03% Max	0.03% Max	0.03% Max

Hardness

Soft (Annealed)

Mechanical Properties

Tensile Strength	100,000 to 180,000 psi
Yield Strength	50,000 to 150,000 psi
Density	0.286 lbs/cu.in

Size Range - 1.588mm (1/16") to 76.2mm (3")

Standard Grades Available

24, 48, 100, 200, 1000