

MATERIAL DATASHEET

Alloy 409 Stainless Steel

UNS: S40910/S40920/S40930

EN-DIN: 1.4512

409 Stainless is used when corrosion protection is needed beyond a carbon steel capacity. Applications include: Automotive, exhaust systems, and heat exchangers.

N	omi	inal	Comp	osition
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	С	Mn	P	S	Si	Cr	Ni	N	Fe	
min	-	-	-	-	-	10.50	-	-	-	
max	.030	1.0	0.040	0.020	1.00	11.70	0.50	0.030	BAL	

Physical Properties

	At 70°F	At 20°C
Density	0.280 lb./in ³	7.75 g/cm ³
Modulus of Elasticity (E)	30.2 x 10 ³ ksi	208.22 x 10 ³ MPa
Electrical Resistivity	24.0 μ ohm.in	60.0 μ ohm.cm

Applicable Specifications

ASTM A240

Typical Mechanical Properties – Typical Room Temperature Mechanical Properties

Condition	Tensile Strength (UTS)	0.2% YS	Elongation% in 2" (50.8 mm)	Hardness Rockwell
Annealed	60 ksi (420 MPa)	28 ksi (193 MPa)	28	66 HRBW

Typical mechanical properties are based, AK source on ASTM A240



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