

Combined Metals Company, LLC Data Sheet

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.

Nominal Composition												
	С	Mn	Р	S	Si	Cr	Ni	N	Fe			
min	-	-	-	-	-	10.50	-	-	-			
max	0.030	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 l	0.280 lb./in ³				7.75 g/cm ³				
Modulus of Elasticity (E)			30.2 x 3	30.2 x 10 ³ ksi				208.22 x 10 ³ MPa				
Electrical Resistivity			24 µ oł	24 μ ohm.in				60 μ ohm.cm				
Applicable Specifications												
	ASTM A240											
Typical Mechanical Properties – Typical Room Temperature Mechanical Properties												
Condi	tion	Tensile	Strength Mi	n (UTS) 0	.2% YS Min	El	ongation% in 2	2" Min (50.8	s mm)	Hardness Rocl	kwell	
Condi Annea	tion aled (Min)	Tensile 55 ksi (Strength Min 380 MPa)	n (UTS) 0	25 ksi (170 r	El MPa)	ongation% in 2	2" Min (50.8 0%	smm)	Hardness Rocl 88 HRBW	kwell (Max)	
Condi Annea	tion aled (Min)	Tensile 55 ksi (Strength Min 380 MPa) Typi	n (UTS) 0	9 .2% YS Min 25 ksi (170 r nical prope	MPa) rties are	ongation% in 2 2 based on AS	2" Min (50.8 0% TM A240	s mm)	Hardness Rocl 88 HRBW	kwell (Max)	

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