



## Combined Metals of Chicago Bellwood Service Center

### Alloy 430 Stainless Steel

**UNS: S43000**  
**EN-DIN: 1.4016**

430 stainless is a ferritic straight chrome grade. 430 presents a good corrosion resistance and formability. Typical applications for 430 include: Appliance (components and surface), and automotive trim.

#### Nominal Composition

	C	Mn	P	S	Si	Cr	Ni	N	Fe		
min	-	-	-	-	-	16.0	-	-	-		
max	0.12	1.0	0.040	0.030	1.00	18.0	0.75	-	BAL		

#### Physical Properties

	At 70°F	At 20°C
<b>Density</b>	0.28 lb./in <sup>3</sup>	7.74 g/cm <sup>3</sup>
<b>Modulus of Elasticity (E)</b>	29 x 10 <sup>3</sup> ksi	200 x 10 <sup>3</sup> MPa
<b>Coefficient of Expansion</b>	5.8 x 10 <sup>-6</sup> microinches/in.-°F (70-600°F)	10.4 μm/m-°C (20-300°C)
<b>Electrical Resistivity</b>	23.68 μ ohm.in	60 μ ohm.cm
<b>Thermal Conductivity</b>	15.1 Btu-in./ft. <sup>2</sup> hr.-°F	26.1 W/m-K

#### Applicable Specifications

AMS 5503, ASTM A240

#### Typical Mechanical Properties – Typical Room Temperature Mechanical Properties

Condition	Tensile Strength Min (UTS)	0.2% YS Min	Elongation% in 2" Min (50.8 mm)	Hardness Rockwell
<b>Annealed (Min)</b>	65 ksi ( 450 MPa)	30 ksi ( 205 MPa)	22%	89 HRBW (Max)

**Typical mechanical properties are based on ASTM A240**

**For further information email:**  
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