



## RED BRASS 80 / 20

### EQUIVALENT SPECIFICATIONS

SPECIFICATIONS	DESIGNATION
EN	CuZn20
DIN	CW503L
UNS	C24000
BS	CZ103

Red Brass with a nominal composition of 80 % copper and 20 % zinc approaches the mechanical properties of CuZn30 but with corrosion properties only slightly inferior to CuZn15. This alloy has a color between yellow and golden red and finds distinctive uses in decorative trim applications. Its color and tonal qualities prove advantageous for musical instruments. Thermostatic and instrument bellows and flexible hose utilize the combined ductility, strength and corrosion resistance characteristics of this alloy.

### TYPICAL USES:

Architecture: medallions, ornamental components, spandrels Builders Hardware: decorative panels  
 Consumer: clock dials, musical instrument parts, plaques Electrical: battery caps, rotor bars for AC motors  
 Industrial: flexible hose, flexible hose bellows, pump lines, welding wire other tokens

### CHEMICAL COMPOSITION

	Cu	Pb	Fe	Zn
Min/Max	78.5-81.5	0.05	0.05	Rem
Nominal	80.0	-	-	20.0

### PHYSICAL PROPERTIES

Density	0.313 lb/in <sup>3</sup> at 68 F
Electrical Conductivity	32 %IACS @ 68 F
Thermal Conductivity	81 Btu Â• ft/(hr Â• ft <sup>2</sup> Â•oF)at 68F

### MECHANICAL PROPERTIES

Temper	Tensile strength Rm	Yield Strength Rp 0.2 Nominal	Elongation 2" Nominal [%]	Hardness Nominal HR30V	Min bend ratio 90°		Min. bend ratio 180°	
	[ksi] [MPa]	[ksi] [MPa]			GW	BW	GW	BW
Soft	44-54 305-373	20 138	50		0	0	0	0
H02	55-65 379-448	42 290	18	62	0	0	1.0	1.5
H04	68-77 469-531	61 421	4	71	0	0	1.5	3.0
H06	78-87 538-600	68 469	2	75	0.5	1.5	2.0	
H08	85-93 586-642	76 524	1	77	1.5		4.0	
H10	89-97 614-669	78 548	1	78	3.0			

### SIZES AVAILABLE :

ROUND RODS/BARS  
 HEX  
 SQUARE  
 FLAT  
 BILLETS  
 TUBES

1 mm To 100 mm  
 5 mm To 60mm  
 5 mm To 60mm  
 5 mm Min Thickness and max Width 120mm  
 Up to 200 mm  
 9.5 mm To 76.20 mm

Regd. Office & Plant

Plot No. 6 & 7, Village: Lakhaval, Post: Khodiyar Colony, Jamnagar - 361006.

Tel.: +91-288-2889251 / 52, Fax: +91-288-2889223, Cell: +91-9924443396

Email: info@metalalloyscorp.com • web: www.metalalloyscorp.com



ENGINEERS INDIA LIMITED  
 (A Govt. of India Undertaking)