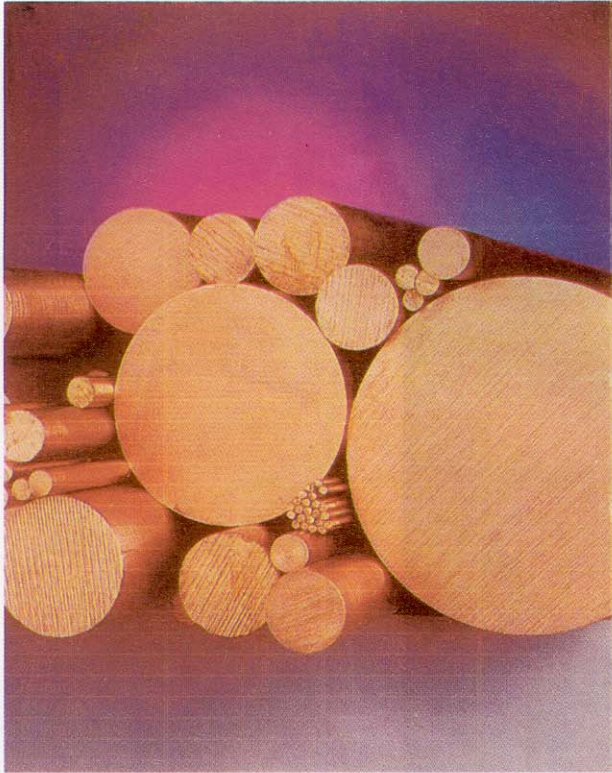
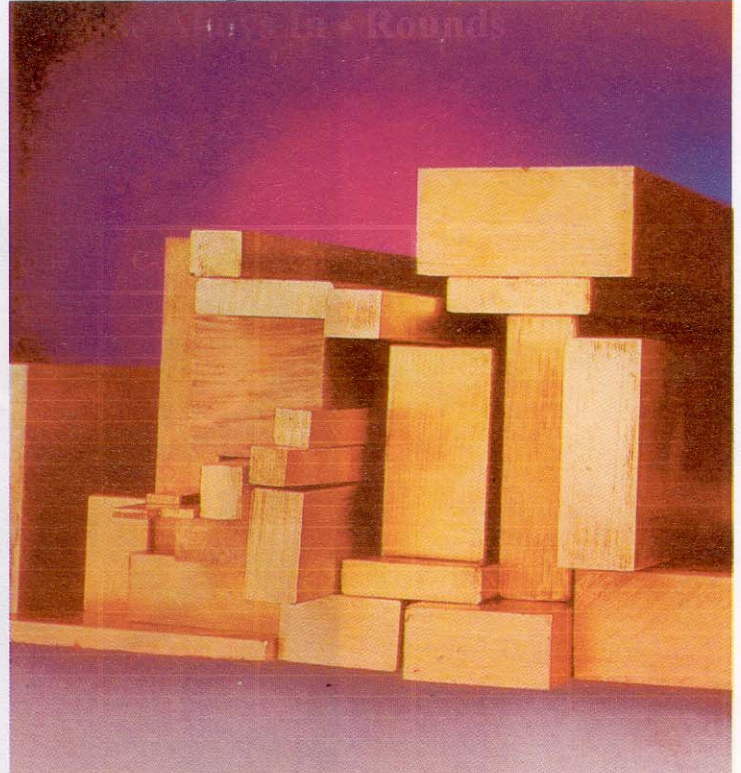
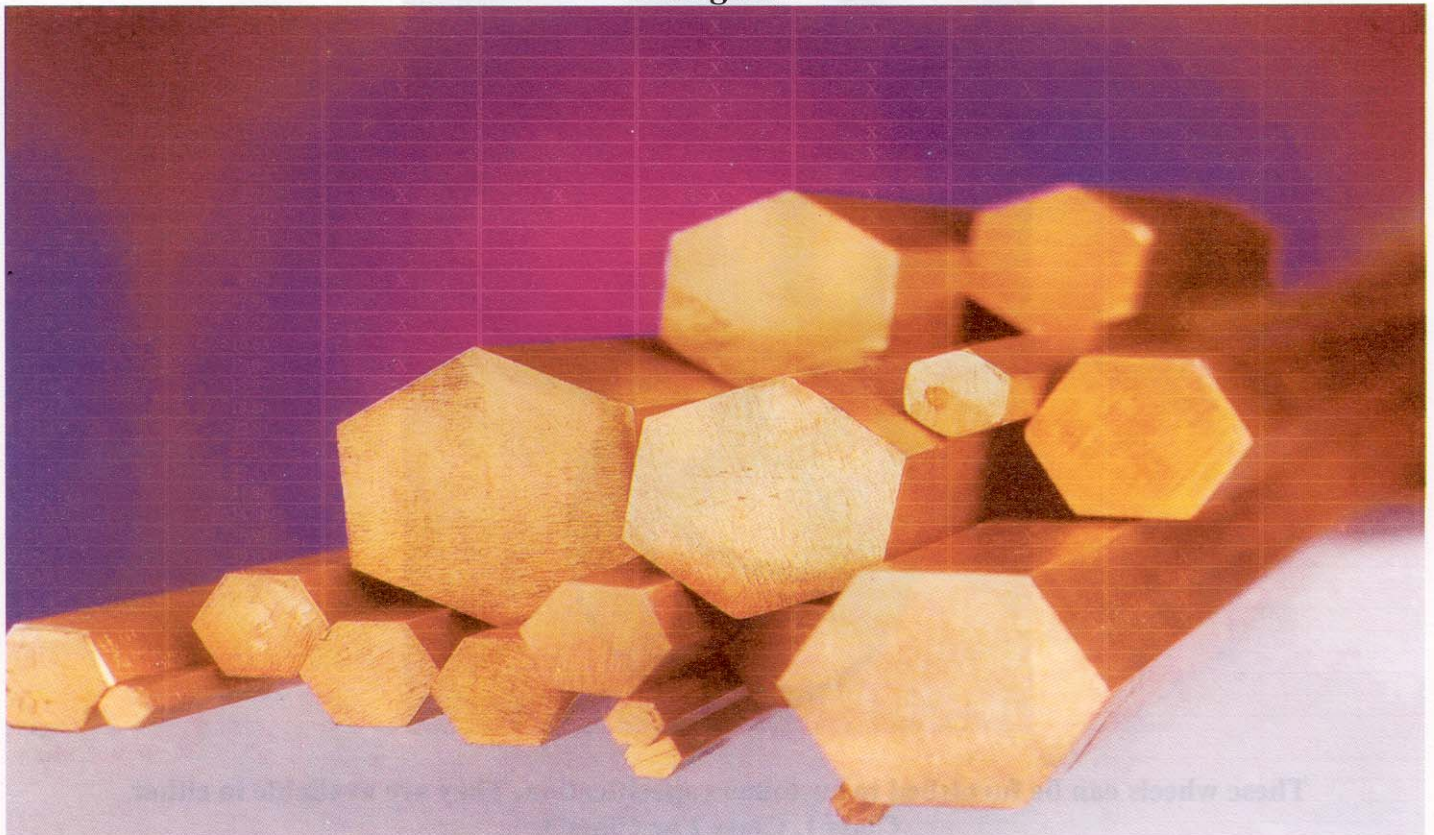
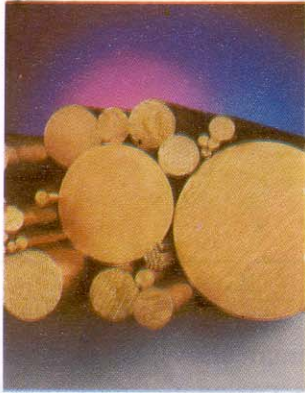


Copper-Base Alloys In

Rounds*Squares & Rectangles**Hexagonal*

REFERENCE DATA

Material		CDA	Description	General Use
RWMA Class 1	Copper Zirconium	C-15000	A specially heat treated zirconium copper alloy that meets the minimum electrical conductivity and hardness specification of Class 1 Alloy.	Electrodes for welding aluminum alloys, magnesium alloys, coated materials, brass and bronzes. Can be used for both spot and seam welding.
	Copper Cadmium	C-16200	A high conductivity cadmium copper alloy , not heat treatable, but can be work hardened.	
RWMA Class 2	Copper Chromium Zirconium	C-18150	A specially heat treated chromium zirconium copper alloy that meets the minimum electrical conductivity and hardness specification of Class 2 Alloy.	These materials are stronger than Class 1 materials but have slightly lower electrical conductivity. They are used for the spot and seam welding of cold and hot rolled steel, stainless steel and low conductivity brass and bronze. They are also used as flash welding dies, and as electrodes for the welding of steel and other materials.
	Copper Chromium	C-18200	A high conductivity chromium copper alloy that obtains its optimum properties from a combination of both heat treatment and cold work.	
RWMA Class 3	Copper Nickel-Beryllium	C-17510	Heat treatable copper alloys with a combination of high tensile strength and good electrical and thermal conductivity.	Their high hardness makes them ideal for electrodes for spot and seam welding of high resistance materials such as stainless steel, nichrome and monel metal. As a casting, they are used for flash, butt and projection welding electrodes and fixtures. They can also be used for seam welder bearings and other current carrying structural parts.
	Copper Nickel Silicon Chromium	C-18000		



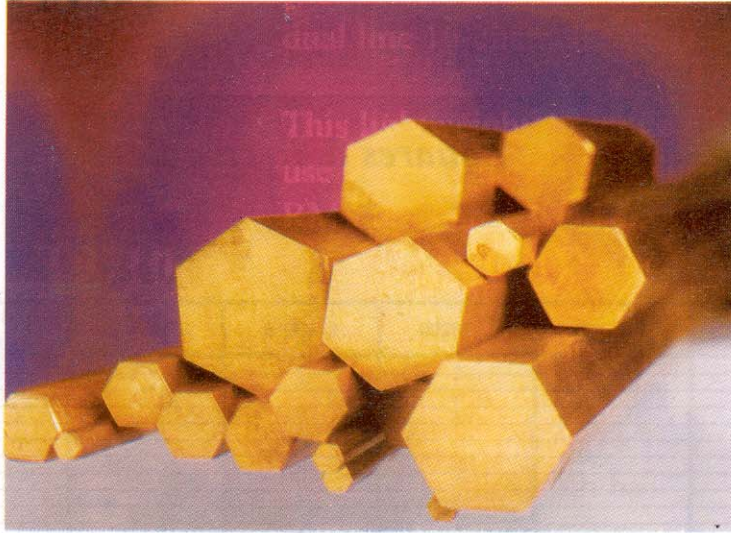
Copper-Base Alloys In - Rounds

SIZE (Diameter)	WEIGHT LBS./FT.	C-15000	C-16200	C-18150	C-18200	C-17510	C-18000	C-18000 Annealed
1/8 "	0.05				X	X		
5/32 "	0.07					X		
3/16 "	0.11	X			X	X		
1/4 "	0.19				X	X	X	
5/16 "	0.29	X			X	X	X	
3/8 "	0.42	X		X	X	X	X	
7/16 "	0.58				X	X	X	
.468/.478 "	0.68						X	
12 mm	0.67			X	X			
.482	0.70	X	X	X	X		X	
12.5 mm	0.73			X	X			
1/2 "	0.76	X	X	X	X		X	
13 mm	0.79			X				
.531/.541 "	0.87						X	
9/16 "	0.95	X	X		X	X	X	
.595/.605 "	1.09						X	
.624/.622 "	1.18	X		X	X		X	X
5/8 "	1.18	X	X	X	X	X	X	X
16 mm	1.20			X	X			
.658/.668 "	1.33						X	
19 mm	1.69			X	X			
.749/.747 "	1.70	X		X	X		X	X
3/4 "	1.70	X	X	X	X	X	X	X
.781/.791 "	1.87						X	
20 mm	1.87			X				X
13/16 "	2.00						X	
.874/.872 "	2.30	X		X	X		X	X
7/8 "	2.30	X		X	X		X	X
24 mm	2.69			X		X		X
.999/.997 "	3.02	X		X	X		X	X
1 "	3.02	X		X	X	X	X	X
28 mm	3.66			X				
1.124/1.122 "	3.81				X		X	X
1-1/8 "	3.81				X		X	X
30 mm	4.22							X
1-1/4 "	4.72	X	X	X	X	X	X	X
1-3/8 "	5.71			X	X		X	X
35 mm	5.73			X	X			
36 mm	6.07						X	X
1-1/2 "	6.79	X		X	X		X	X
1-5/8 "	7.96			X	X		X	X
1-3/4 "	9.24	X		X	X		X	
1-7/8 "	10.63				X			
2 "	12.06	X		X	X		X	
2-1/4 "	15.27				X		X	
2-1/2 "	18.86	X		X	X		X	
2-3/4 "	22.81				X		X	
3	27.14	X		X	X		X	
3-1/8 "	29.45				X		X	
3-1/4 "	31.86	X			X	X	X	
3-3/8 "	34.36			X	X		X	
3-1/2 "	36.95	X			X	X		
3-5/8 "	39.63				X		X	
3-3/4 "	42.42				X		X	
3-7/8 "	45.29				X		X	
4 "	48.26				X		X	
4-1/8 "	51.32				X		X	
4-3/8 "	57.88						X	
4-1/2 "	61.07	X					X	
4-5/8 "	64.52				X		X	
5 "	75.40	X						
5-1/8 "	79.22				X		X	
6-1/8 "	113.15	X			X		X	
7 "	148.18						X	
8 "	193.54						X	
9 "	244.94						X	
10 "	302.40						X	



Copper-Base Alloys In *Squares & Rectangles*

SIZE (Thickness x Width)	WEIGHT LBS./FT.	C-15000	C-16200	C-18150	C-18200	C-17510	C-18000	C-18000 Annealed
1/8" x 1/8"	0.06				X	X		
1/8" x 1/2"	0.24				X	X		
1/8" x 5/8"	0.30				X			
1/8" x 3/4"	0.36				X	X		
3/16" x 3/16"	0.14					X		
3/16" x 1/2"	0.37							
1/4" x 1/4"	0.24			X	X	X		
1/4" x 1/2"	0.48				X	X		
1/4" x 3/4"	0.72				X	X		
1/4" x 7/8"	0.84				X			
1/4" x 1"	0.96				X	X		
1/4" x 1-1/2"	1.44				X	X		
1/4" x 2"	1.92				X	X		
1/4" x 2-1/2"	2.40				X			
1/4" x 3"	2.88				X			
5/16" x 3/4"	0.90	X		X	X			
3/8" x 3/8"	0.54				X	X		
3/8" x 1/2"	0.72				X	X		
3/8" x 3/4"	1.08	X		X	X	X		
3/8" x 1"	1.44				X	X	X	
3/8" x 1-1/2"	2.16				X	X	X	
3/8" x 2"	2.88				X	X		
3/8" x 2-1/4"	3.27						X	
3/8" x 2-1/2"	3.63				X			
7/16" x .770"	1.29	X						
1/2" x 1/2"	0.96			X	X		X	
1/2" x 5/8"	1.20				X			
1/2" x 3/4"	1.44			X	X		X	
1/2" x 7/8"	1.68	X		X				
1/2" x 1"	1.92				X		X	
1/2" x 1-1/4"	2.42				X			
1/2" x 1-1/2"	2.88				X		X	
1/2" x 2"	3.84	X			X		X	
1/2" x 2-1/2"	4.85				X			
1/2" x 3"	5.76				X		X	
1/2" x 4"	7.68				X			
15 mm x 15 mm	1.35						X	
5/8" x 5/8"	1.50				X		X	
5/8" x 3/4"	1.80				X			
5/8" x 1"	2.40	X			X		X	
5/8" x 1-1/4"	3.00				X			
5/8" x 1-1/2"	3.60				X		X	
5/8" x 2"	4.80				X		X	
5/8" x 3"	7.27				X			
18 mm x 18 mm	1.95						X	
3/4" x 3/4"	2.16				X		X	
3/4" x 1"	2.88				X		X	
3/4" x 1-1/4"	3.60	X			X			
3/4" x 1-1/2"	4.32				X		X	
3/4" x 1-3/4"	5.04				X			
3/4" x 2"	5.76				X		X	
3/4" x 2-1/2"	7.20				X		X	
3/4" x 3"	8.64				X		X	
3/4" x 3-3/4"	10.90				X			
3/4" x 4"	11.63				X			
7/8" x 1-1/8"	3.78	X		X				
7/8" x 1-3/4"	5.88						X	
1" x 1"	3.84	X		X	X		X	
1" x 1-1/8"	4.32	X		X				
1" x 1-1/4"	4.80				X		X	
1" x 1-1/2"	5.76			X	X		X	
1" x 1-3/4"	6.72	X			X			
1" x 2"	7.68				X		X	
1" x 2-1/2"	9.60			X	X		X	
1" x 3"	11.52				X		X	
1" x 4"	15.36				X			
1-1/8" x 1-1/8"	4.86				X			
1-1/8" x 1-5/75"	7.14	X						
1-1/4" x 1-1/4"	6.00				X		X	
1-1/4" x 1-1/2"	7.20				X		X	
1-1/4" x 1-3/4"	8.40				X			
1-1/4" x 2"	9.60				X			
1-1/4" x 2-1/2"	12.00				X			
1-3/8" x 1-3/8"	7.26						X	
1-3/8" x 1-5/8"	8.58	X						
1-3/8" x 3"	15.84						X	
1-1/2" x 1-1/2"	8.64				X		X	
1-1/2" x 1-3/4"	10.17				X			
1-1/2" x 2"	11.52				X		X	
1-1/2" x 2-1/2"	14.54				X			
1-1/2" x 3"	17.28						X	
1-3/4" x 1-3/4"	11.87	X						
1-3/4" x 2"	13.44				X		X	
1-3/4" x 3"	20.16						X	
2" x 2"	15.36	X			X		X	
2" x 3"	23.04						X	



Copper-Base Alloys In *Hexagonal*

SIZE (Across Flats)	WEIGHT LBS./FT.	C-15000	C-16200	C-18150	C-18200	C-17510	C-18000	C-18000 Annealed
3/8 "	0.47				X			
7/16 "	0.64				X			
1/2 "	0.84	X		X	X		X	
9/16 "	1.07	X		X				
5/8 "	1.31				X		X	
3/4 "	1.89				X		X	
7/8 "	2.57				X			
1 "	3.36				X		X	
1 1/8 "	4.25	X			X		X	
1 1/4 "	5.25				X		X	
1 3/8 "	6.35				X		X	
1 1/2 "	7.55				X		X	