

RED METALS



The Complete Source for all Your
Copper, Brass & Bronze Requirements



America's Premier Metals & Plastics Service Center



Alro Steel
Metals & Plastics

alro.com

RED METALS: COPPER

Copper is a ductile metal with very high thermal and electrical conductivity. Pure copper is soft and malleable. It is often used as a conductor of heat and electricity, a building material and a constituent of various metal alloys. Copper has outstanding corrosion resistance, excellent cold formability and machines quite easily.

Copper End Uses:

- Bus bar, for telecommunications and housing industries
- Domestic and industrial plumbing goods
- Chemical processing equipment
- Contacts and switchgear
- Heat transfer devices & electrical wiring

Copper Grades and Shapes stocked at Alro:

- **CDA 110** round, square and flat bar
- **CDA 145** round and hex
- **Cold rolled copper roofing sheet:**
 - 12 oz. (Full sheets available)
 - 16 oz. (Full sheets available)
 - 20 oz. (Full sheets available)

Copper Grades available by inquiry (non-stock):

- **CDA 101, 102** Oxygen free
- **CDA 122** Phosphorus Deoxidized
- **CDA 182** RWMA Class II Chrome Copper
- **CDA 17510** RWMA Class III Beryllium Copper
- **CDA 180** RWMA Class III Beryllium free Copper
- **CDA 187** Leaded Copper



CDA 110 (ETP) Copper						
SHAPE	THICKNESS	LENGTH	SHAPE	THICKNESS	WIDTH	LENGTH
Round:	1/4" - 6" dia.	12 ft	Flat:	1/16" - 2"	2-1/2" - 8"	12 ft
Square:	3/8" - 4" thick	12 ft	Plate:	1/4" - 6"	36"	8 ft
	Coil - By inquiry only		Sheet:	.032"-.235"	36"	8 ft

CDA 145 Tellurium Copper			
SHAPE	THICKNESS	LENGTH	
Round:	1/4" - 2" dia.	12 ft	

Beryllium Copper Plate

Used mostly in the mold industry, Beryllium Copper Plate offers an optimum combination of:

- Hardness
- Thermal fatigue
- Wear resistance
- Thermal conductivity

When compared to Steel and Aluminum, **CDA 172 Beryllium Copper Plate** offers advantages such as:

- Minimizing part distortion
- Better dimensional stability
- Improved cycle time

This material can be welded by several methods including resistance, MIG and TIG welding. **Alro offers Beryllium Copper Plate in Ultra (RC 36-42) and Supra (RC 25-32).**



CDA 172 Beryllium Copper					
TYPE	PLATE	DIAMETER	TYPE	PLATE	DIAMETER
Low Hard / Supra (RC 25-32)	1/4" - 4" Thick	Inquire	High Hard / Ultra (RC 36-42)	1/4" - 3" Thick	Inquire

-- CDA 172 Beryllium Copper available by inquiry only (non-stock) --



RED METALS: BRASS

CDA 360, also known as **Free Machining Brass** due to its excellence in continuous, high speed machining applications, will offer minimal tool and machine wear during long production runs. Like Copper, **CDA 360 Free Machining Brass** is a soft, ductile metal and machines quite easily. Some other advantages include outstanding corrosion resistance and excellent cold formability.

Readily available, **CDA 360 Free Machining Brass** shapes include flat bar, rounds, squares and hex. **CDA 260 Half Hard Brass** sheet and plate are available from Alro stock. Tubing and special shapes are available upon request.

Brass End Uses:

- Ammunition Components
- Automotive
- Hardware
- Plumbing

Special Alloys available by inquiry (non-stock):

- **CDA 353** Thread Rolling
- **CDA 345** Thread Rolling
- **CDA 365** Leaded Muntz
- **CDA 693** Lead Free
- **CDA 798** Nickel Silver



CDA 360 Free Machining Brass

SHAPE	THICKNESS	LENGTH	SHAPE	THICKNESS	WIDTH	LENGTH
Round:	1/8" - 12" dia.	12 ft	Flat:	1/8" - 2"	1/4" - 6"	12 ft
Hex:	1/8" - 4"	12 ft	Square:	3/16" - 4"	-	12 ft

Diameters 5" and up provided as Cast & Turned. For Tubing and Special Shapes please inquire.

CDA 260 Half Hard Brass

SHAPE	THICKNESS	WIDTH	LENGTH
Sheet:	.025" - .1875"	36"	8 ft
Plate:	1/4" - 1/2"	36"	8 ft

RED METALS: BRONZE

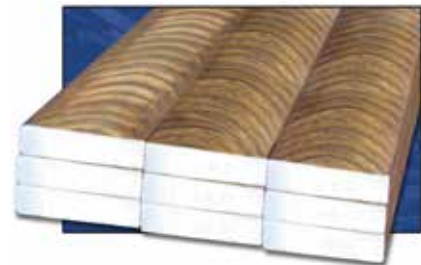
Continuous Cast Bronze Products (932, 954 & 959) are cast oversized to allow for finish machining to nominal dimensions and provides uniform grain structure which can eliminate hard spots and improve machinability. Unlike Copper and Brass, Bronze is a hard, strong alloy, preferred in applications where high impact, wear and vibration are an issue.

CDA 932/SAE 660 Bearing Bronze is used in many industrial, automotive, appliance, bearing and bushing applications. Some advantages include good wear resistance and excellent machinability. Bearing Bronze is the most economical choice alloy for general purpose bearing and wear use.

CDA 954 & 959 Aluminum Bronze offers exceptional performance in bearings, bushings and other applications where abrasion, wear and fatigue are encountered. Aluminum Bronze offers high strength, excellent corrosion resistance and better strength and performance at elevated temperatures than 932/660. It can be heat treated to higher hardness.

Bronze grades available by inquiry (non-stock):

- **CDA 314, 316** Leaded Commercial Bronze
- **CDA 385** Architectural Bronze
- **CDA 464** Naval Bronze
- **CDA 510, 521, 524, 544** Phosphorous Bronze
- **CDA 630** Nickel Aluminum Bronze
- **CDA 642, 651, 655** Silicon Bronze
- **CDA 798** Nickel Silver
- **SAE 841** Sintered Bronze
- **CDA 863** Manganese Bronze
- **CDA 903, 907** High Tin Bronze



Available Bronze Shapes and Sizes from Alro stock:

CDA 932/SAE 660 Bronze

SHAPE	THICKNESS	WIDTH	LENGTH
Flat:	1/4" - 4" thk	6" - 10"	105" - 107"
Round:	3/8" - 12" dia	-	105" - 107"
Hollowbar:	1"OD - 16"OD	-	105" - 107"

CDA 954 Aluminum Bronze

SHAPE	THICKNESS	WIDTH	LENGTH
Flat:	1/4" - 1" thk	3" - 6"	12 ft
Square:	1/2" - 6" thk	-	12 ft
Round:	1/2" - 11" dia	-	12 ft
Hollowbar:	1"OD - 9"OD	-	12 ft

CDA 959 Aluminum Bronze

SHAPE	THICKNESS	WIDTH	LENGTH
Flat:	1/4" - 1" thk	3" - 6"	12 ft

For Square Bar please inquire



Alro Locations



● **Metals** ● **Plastics** ● **Outlet Stores**

Over 80 Locations in 16 States!

Florida	Michigan	Pennsylvania
Illinois	Missouri	Tennessee
Indiana	New York	Virginia
Iowa	North Carolina	Wisconsin
Kentucky	Ohio	
Maryland	Oklahoma	



Pictured, the Alro Steel facility in Pottsville, Michigan



Alro Steel was founded in 1948 by brothers Al and Robert Glick in Jackson, Michigan. The company is a distributor of metals and plastics. Alro is focused on offering cut-to-size metals and plastics with next day delivery to over 50,000 customers in North America. Alro operates over 80 locations in 16 states and provides a broad inventory of products under the following companies: Alro Steel, Alro Metals, Alro Metals Outlet, and Alro Plastics. Focused on exceeding our customers' expectations, we build relationships with all our customers, large and small. [To learn more, please visit alro.com.](http://alro.com)

Metals	Bar	Pipe & Tube	Plate & Sheet	Structural	Grating & Exp. Metal
Alloy	●	●	●		
Aluminum	●	●	●	●	●
Brass	●		●		
Bronze	●	●			
Carbon Steel	●	●	●	●	●
Cast Iron	●	●			
Copper	●	●	●		
Stainless Steel	●	●	●	●	●
Tool Steel	●		●		

e-Business Solutions

- Alro Online Store (MyAlro.com)
- Customized Summary Billing
- Tool Management Solutions
- B2B Transactions

Ask your Alro Representative for details!



Since 1948

