



**Right shape.
Right size.
Right now.**

**Quality copper extrusions from
The Specialty Copper Mill**

- ◆ Custom shapes
- ◆ Special alloys
- ◆ Controlled conductivity
- ◆ Rapid turnaround
- ◆ Cut-to-length
- ◆ Detail machining
- ◆ In-house electro-plating
- ◆ In-house tooling

ISO 9001
CERTIFIED

ELECTRIC MATERIALS

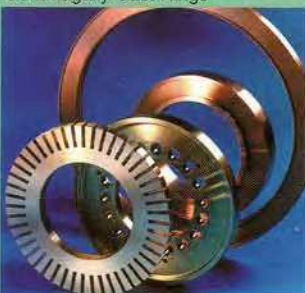
Providing engineered solutions since 1915



Commutators



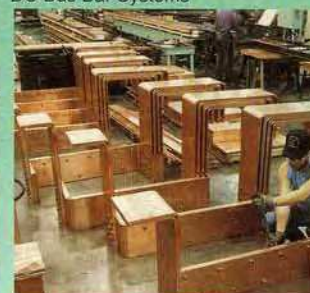
Centrifugally Cast Rings



Electrical Copper Fabrications



DC Bus Bar Systems



Collector Rings



Nonstop Service



with

TEMCO EXPRESS

EMERGENCY COMMUTATOR REPAIR

When you need commutator repair in a hurry, take the Temco Express. We provide continuous service 24 hours a day, 365 days a year.

Here's how it works. When your commutator arrives at our receiving dock – bearing a bright Temco Express label – we start the rebuilding process immediately. And we continue the

process – nonstop – until your commutator is repaired, properly seasoned, tested, and shipped back. No idle time allowed. No corners cut. With Temco Express you get it right the first time, on time, every time.

Call today for more information and your supply of Temco Express labels.



*When you don't have the time,
take the Temco Express.*

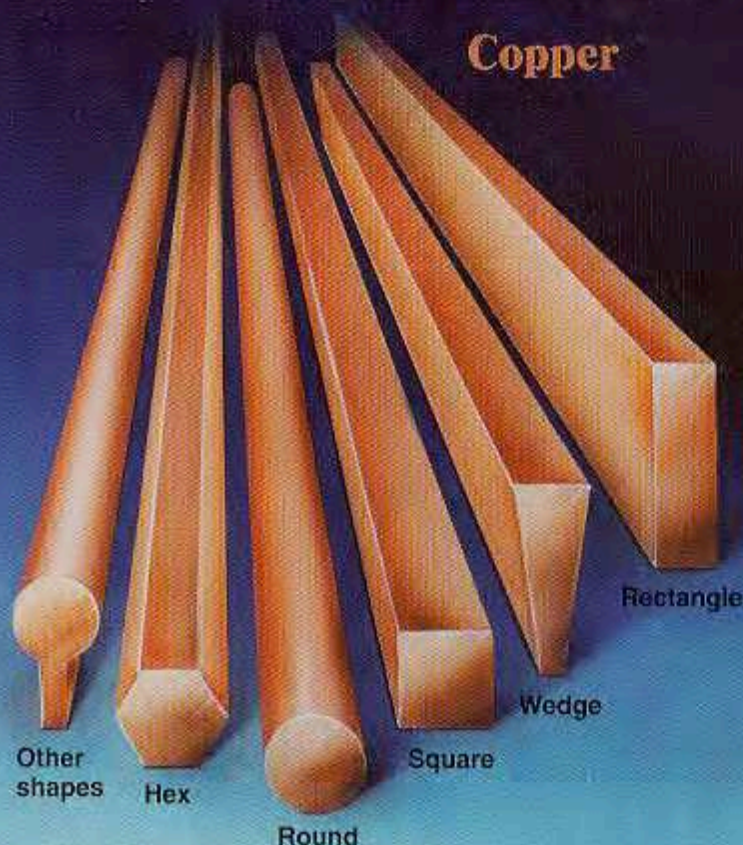
ELECTRIC MATERIALS



The Electric Materials Company
50 South Washington
North East, Pennsylvania 16428
Phone: 800-356-2211
Fax: 814-725-3620
<http://www.elecmat.com>
email: sales@elecmat.com

Copper and electrical bronze bar, rod and extruded shapes

Copper



For bus bars, commutators, rotor bars, coils, anodes, forging stock

Electrical Bronze



For rotor bars and other electrical applications

Standard Sizes/Styles

- ◆ 3/32" x 3/8" to 1" x 4" flats
- ◆ 1/4" to 1 3/4" dia. or square
- ◆ 1/2" to 1 3/4" hex. (Consult mill for other sizes).
- ◆ Mill lengths and exact lengths
- ◆ Coils and fabricated forms
- ◆ Edge selections: square, rounded corner, radius corner, full round
- ◆ See back for alloys and additional data.

Other mill services:

- ◆ Cut to length
- ◆ Punching, threading
- ◆ Drilling, tapping
- ◆ Silver or tin plating

Find out more about how The Electric Materials Company can meet your extrusion requirements. Call The Specialty Copper Mill toll free at 800-356-2211 or visit our website www.elecmat.com.

ELECTRIC MATERIALS

Providing engineered solutions since 1915



Bar, rod and extruded shapes

	UNS Number	Nominal Composition	Electrical Conductivity % I.A.C.S.	Applicable ASTM Spec.
Copper	C-11000	99.90% Copper	100%	B-187
	C-10200	99.95% Copper	101%	B-187
	C-10700	99.95% Copper with 25 troy oz. per ton silver	100%	B-187
	C-11300	99.90% Copper with 8 troy oz. per ton silver	100%	B-187
	C-11400	99.90% Copper with 10 troy oz. per ton silver	100%	B-187
	C-11600	99.90% Copper with 25 troy oz. per ton silver	100%	B-187
	C-12220	99.90% Copper with .040-.065 phosphorus	98%	
	C-14700	99.90% Copper with .20 - .50 sulfur	95%	B-301
	C-18200	Copper with .6 - 1.2 chromium	80%	
Electrical Bronze	C-21000	5% Zinc	56% \pm 2%	B-36
	C-22000	10% Zinc	45% \pm 1.5%	B-36
	C-22600	12.5% Zinc	40% \pm 1.5%	
	C-23000	15% Zinc	37% \pm 1%	B-36
	C-23030	15% Zinc — .3% Silicon	25% \pm 1%	
	C-24000	20% Zinc	32% \pm 1%	B-36
	C-64700	2% Nickel — .5% Silicon	21 - 24% Solution Annealed 37 - 45% Age Hardened	B-411 B-411
	C-65100	1.6% Silicon — .3% Manganese	11% \pm .1%	B-98
	C-65500	3.2% Silicon — .8% Manganese	6.5% \pm .5%	B-98
	C-70100	4% Nickel	25% \pm 1%	
	CC-SI-15*	1.2% Silicon — .3% Manganese	15% \pm 1%	
	CC-NI-35*	2.4% Nickel	35% \pm 1%	
	CC-NI-54*	1% Nickel	54% \pm 2%	

* Custom Alloys



- ◆ The Electric Materials Plant is located 150 miles north of Pittsburgh along Lake Erie, midway between Buffalo and Cleveland.
- ◆ As an independent producer, we are geared to provide customers fast, quality service.
- ◆ We encourage customers to visit our plant when traveling through our area.

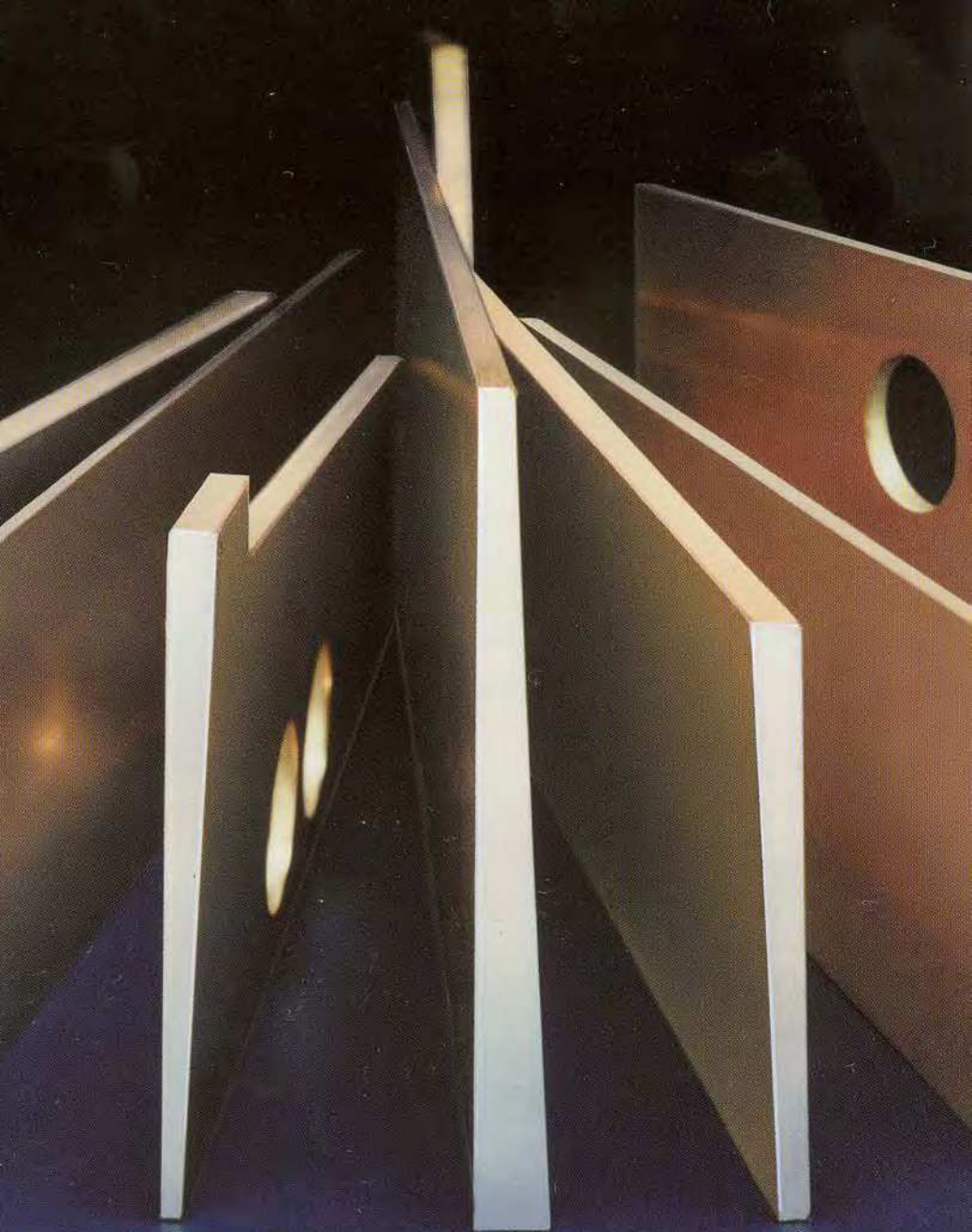
ELECTRIC MATERIALS

CASTINGS • FORGINGS • EXTRUSIONS • ROTOR BARS • BUS SYSTEMS • COMMUTATORS

Electric Materials • 50 South Washington Street • North East, PA 16428
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<http://www.elecmat.com> • email: sales@elecmat.com

Right the First Time – On Time – Every Time





**Looking for a reliable source for
electrical copper components?**

Look no further . . .

Everything you need is at

OEM and refill commutators/commutator bars

Start to finish capability in commutator design and manufacture with over 75 years experience . . . 5" diameter up through 12" diameter.



Copper and copper alloy rods, bars and extrusions

High quality rods, bars and extrusions from our own specialty mill are available in a virtually unlimited variety of shapes, sizes and lengths. Small production runs and rapid service are our specialty.



Fabricated DC bus bar systems and components

We design, engineer and manufacture to your specifications and supply all bars, clamps, connectors, hardware, insulators, supports and drawings. Start to finish service — all in-house.



ELECTRIC MATERIALS

ETM
©



Centrifugally cast rings

High performance collector rings centrifugally cast to near net shape for superior performance properties and precision machined to exact tolerances.



Electrical copper fabrications

Copper fabrications for virtually any electrical requirement. Complete in-house facilities for extruding, casting, forging, machining, welding and plating in copper and chrome copper alloys. Large or small quantities.



Collector rings

Collector assemblies, slip rings and rotor end rings designed, engineered, produced and tested to your specifications. Remanufacturing services also available.