THE ELECTRIC MATERIALS COMPANY

COMMUTATORS~EXTRUSIONS~ROTOR BAR~CASTINGS~FORGINGS

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## TECHNICAL DATA SHEET

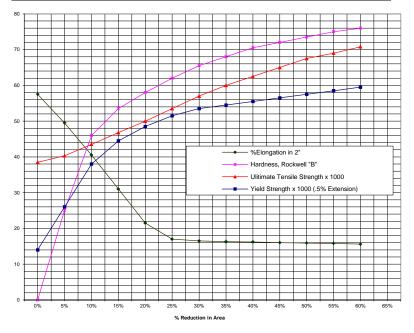
UNCONTROLLED CO

**COMMON USES:** TEMCO Alloy C22600 has been specifically developed for rotor bar applications. Close control of the chemistry, including trace elements, at our in-house casting facility allows us to control the electrical properties within a very narrow range. This insures our customers the same electrical properties each time they order. Consult our Sales Department to discuss your specific application. **\*\*Please Note: Minimum order quantity is 5000 pounds for this alloy\*\*** 

CHEMISTRY				
ELEMENT	NOMINAL %	RANGE %		
Copper	87.5	86 - 89		
Zinc	12.5	Remainder		
Lead		.05 max.		
Iron		.05 max.		

	TYPICAL PROPERTIES			
TEMPER	TENSILE STRENGTH ksi (MPa)	YIELD STRENGTH* ksi (MPa)	ELONGATION %	HARDNESS ROCKWELL
Annealed (061)	39 (270)	14 (95)	57	RF 50
Ho1 (10%)	43 (295)	38 (260)	41	RB 36
Ho2 (20%)	50 (345)	48 (330)	21	RB 58
Ho4 (36%)	60 (415)	54 (270)	16	RB 68
	*0.5 % EXTENSION UNDER LOAD			

CAPABILITY FOR BEING COLD WORKED	EXCELLENT
CAPABILITY FOR BEING HOT WORKED	GOOD
HOT WORKING TEMPERATURE	1400° - 1650° F 750° - 900° C
ANNEALING TEMPERATURE	800° - 1400° F 425° - 750° C



SOFT SOLDERING	EXCELLENT
SILVER ALLOY BRAZING	EXCELLENT
OXYACETYLENE WELDING	GOOD
COATED METAL ARC WELDING	NOT RECOMMENDED
RESISTANCE WELDING	FAIR

## **MISCELLANEOUS INFORMATION:**

MACHINEABILITY RATE\* 30 \*Free Machining Brass = 100

CONDUCTIVITY 40 %  $\pm$  1.5 % IACS @ 68° F

DENSITY .317 lb/cu in (8.78 gm/cu cm @ 20° C)

NEAREST APPLICABLE ASTM SPEC: NONE

RIGHT THE FIRST TIME - ON TIME - EVERY TIME, 1/17, pjs