THE ELECTRIC MATERIALS COMPANY
COMMUTATORS~EXTRUSIONS~ROTOR BAR~CASTINGS~FORGINGS
A UNITED STARS CO.
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TEMCO ALLOY C22000

TECHNICAL DATA SHEET

COMMON USES: TEMCO Alloy C22000 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.

CHEMISTRY

ELEMENT	NOMINAL %	RANGE %
Copper	90	89 - 91
Zinc	10	Remainder
Lead	--	.05 max.
Iron	--	.05 max.

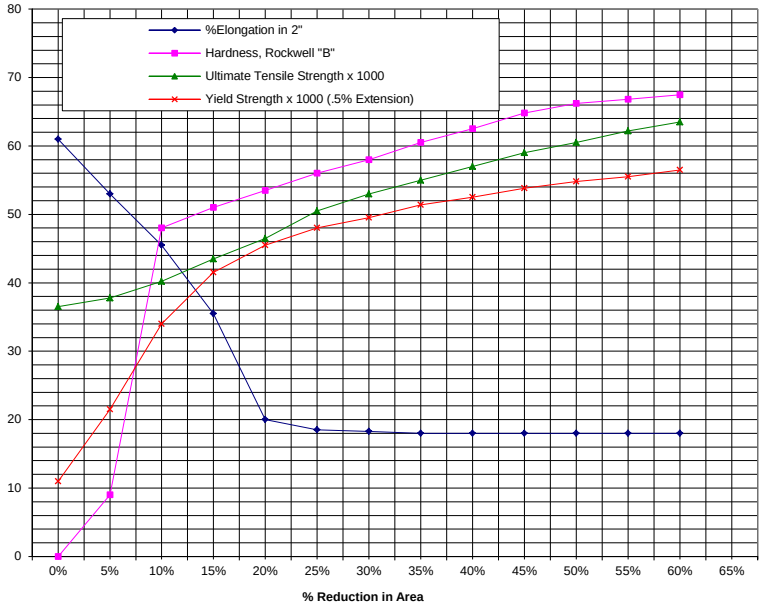
TYPICAL PROPERTIES

TEMPER	TENSILE STRENGTH ksi (MPa)	YIELD STRENGTH* ksi (MPa)	ELONGATION %	HARDNESS ROCKWELL
Annealed (061)	37 (255)	11 (75)	60	RF 45
Ho1 (10%)	40 (275)	29 (200)	45	RB 48
Ho2 (20%)	47 (325)	45 (310)	20	RB 54
Ho4 (36%)	55 (380)	51 (350)	18	RB 60

*0.5 % EXTENSION UNDER LOAD

CAPABILITY FOR BEING COLD WORKED	EXCELLENT
CAPABILITY FOR BEING HOT WORKED	GOOD
HOT WORKING TEMPERATURE	1400° - 1600° F 750° - 875° C
ANNEALING TEMPERATURE	800° - 1450° F 425° - 800° C

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



MISCELLANEOUS INFORMATION:

MACHINEABILITY RATE* 20
*Free Machining Brass = 100

CONDUCTIVITY 44 % ± 1.5 % IACS @ 68° F

DENSITY .318 lb/cu in (8.80 gm/cu cm @ 20° C)

NEAREST APPLICABLE ASTM SPEC: *B36, B130, B131, B134*