



TEMCO ALLOY C23000

TECHNICAL DATA SHEET

UNCONTROLLED COPY

COMMON USES: TEMCO Alloy C23000 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.

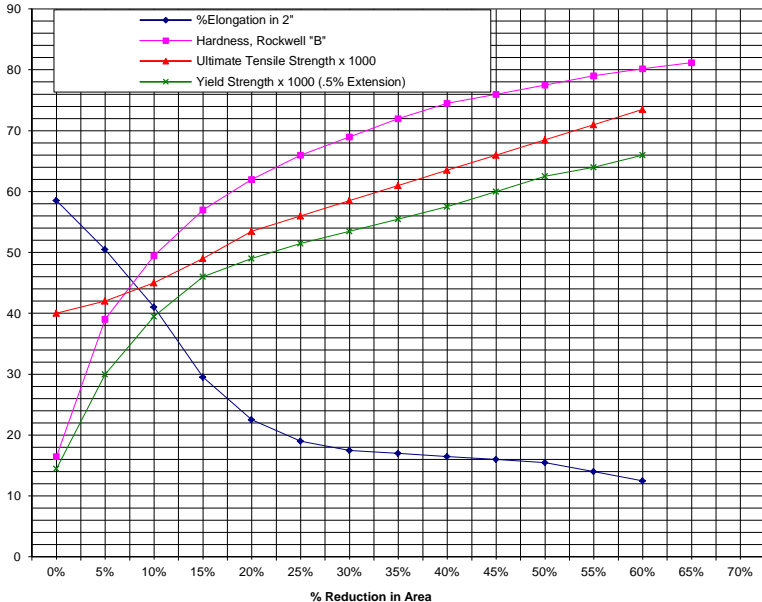
CHEMISTRY		
ELEMENT	NOMINAL %	RANGE %
Copper	85	84 – 86
Zinc	15	Remainder
Lead	--	.05 max.
Iron	--	.05 max.

TEMPER	TYPICAL PROPERTIES			
	TENSILE STRENGTH ksi (MPa)	YIELD STRENGTH* ksi (MPa)	ELONGATION %	HARDNESS ROCKWELL
Annealed (061)	40 (275)	13 (90)	58	RF 60
Ho1 (10%)	45 (310)	40 (275)	41	RB 50
Ho2 (20%)	53 (365)	49 (340)	22	RB 62
Ho4 (36%)	62 (425)	55 (380)	17	RB 72

*0.5 % EXTENSION UNDER LOAD

CAPABILITY FOR BEING COLD WORKED	EXCELLENT
CAPABILITY FOR BEING HOT WORKED	GOOD
HOT WORKING TEMPERATURE	1450° - 1650° F 800° - 900° C
ANNEALING TEMPERATURE	800° - 1350° F 425° - 725° 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 37 % ± 1 % IACS @ 68° F

DENSITY .316 lb/cu in (8.75 gm/cu cm @ 20° C)

NEAREST APPLICABLE ASTM SPEC: B36, B134