



# TEMCO ALLOY C23030

## TECHNICAL DATA SHEET

UNCONTROLLED COPY

**COMMON USES:** TEMCO Alloy C23030 has been found to be an excellent choice by many of our customers for use as Rotor Bar. Its combined physical properties, electrical conductivity and ease of joining make it a natural choice for many rotor applications. Consult our Sales Department to discuss your specific application.

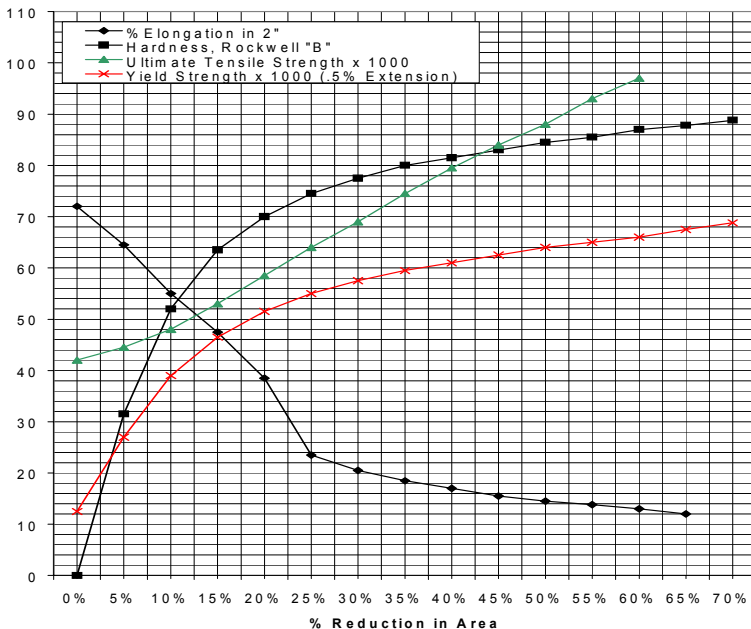
CHEMISTRY		
ELEMENT	NOMINAL %	RANGE %
Copper	84.7	83.5-85.5
Zinc	15	Remainder
Silicon	.3	.20-.40
Lead	--	.05 max.
Iron	--	.05 max.

TEMPER	TYPICAL PROPERTIES			
	TENSILE STRENGTH ksi (MPa)	YIELD STRENGTH* ksi (MPa)	ELONGATION %	HARDNESS ROCKWELL
Annealed (061)	42 (290)	12 (83)	70	RF 55
Ho1 (10%)	48 (330)	39 (270)	55	RB 52
Ho2 (20%)	58 (400)	51 (350)	28	RB 70
Ho4 (36%)	74 (510)	60 (415)	18	RB 80

\*0.5 % EXTENSION UNDER LOAD

CAPABILITY FOR BEING COLD WORKED	EXCELLENT
CAPABILITY FOR BEING HOT WORKED	GOOD
HOT WORKING TEMPERATURE	1300° - 1600° F 705° - 870° C
ANNEALING TEMPERATURE	800° - 1350° F 425° - 730° C

SOFT SOLDERING	EXCELLENT
SILVER ALLOY BRAZING	EXCELLENT
OXYACETYLENE WELDING	GOOD
COATED METAL ARC WELDING	POOR
RESISTANCE WELDING	FAIR



### MISCELLANEOUS INFORMATION:

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

CONDUCTIVITY 25 % ± 1 % IACS @ 68 °F (20° C)

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

NEAREST APPLICABLE ASTM SPEC: NONE