



LOW LEADED NICKEL COPPER

EQUIVALENT SPECIFICATIONS

SPECIFICATIONS	DESIGNATION
ISO	CuNi30Mn1Fe
European	CuNi30Mn1Fe
BS	CN 107
JIS	C 7150
Russian	MNZMo30-1-1

C19140 is unique precipitation hardening alloys containing copper, lead, nickel and phosphorus. The nickel and phosphorus in the alloy combine to form nickel phosphate, which dissolves in the copper on heating to a suitable temperature, and can be retained by quenching. Subsequent aging will precipitate the nickel phosphate from solid solution in a highly dispersed manner thereby creating a remarkable hardening and strengthening effect with excellent stress relaxation properties. Subsequent cold working increases the strength still further.

TYPICAL USES

ELECTRICAL: Contacts, Sockets, Connector Pins

CHEMICAL COMPOSITION

	Cu (1)	Fe	Pb	Ni	P	Sn	Zn
Min/Max	Rem.	.05	.40 - .8	.8 - 1.2	.15 - .35	.05	.50
Nominals	98.2	-	.6	1.0	.20	-	-

PHYSICAL PROPERTIES

	US Customary
Melting Point - Liquidus	1980 F
Melting Point - Solidus	1900 F
Density	0.320 lb/in ³ at 68 F
Specific Gravity	8.880
Electrical Conductivity	55 %IACS @ 68 F
Thermal Conductivity	146 Btu • ft/(hr • ft ² • oF)at 68F
Modulus of Elasticity in Tension	18000 ksi
Modulus of Rigidity	6000 ksi

SIZES AVAILABLE :

HOLLOW RODS	Min Bore Size 20 mm and Max OD 100 mm
ROUND RODS/BARS	8mm To 100 mm
HEX	10mm To 60mm
SQUARE	10mm To 60mm
FLAT	10mm Min Thickness and max Width 120mm
BILLETS	Up to 200 mm
INGOTS	As per Specification

Regd. Office & Plant
 Plot No. 6 & 7, Village: Lakhavaval, Post: Khodiyar Colony, Jamnagar - 361006.
 Tel.: +91-288-2889251 / 52, Fax: +91-288-2889223, Cell: +91-9924443396
 Email: info@metalalloyscorp.com • web: www.metalalloyscorp.com



ENGINEERS INDIA LIMITED
 (A Govt. of India Undertaking)