

# SHREE EXTRUSIONS LIMITED



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	Р	SnZn
Min/Max	Rem.	.05	.408	.8 - 1.2	.1535	.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/inÂ <sup>3</sup> at 68 F		
Specific Gravity	8.880		
Electrical Conductivity	55 %IACS @ 68 F		
Thermal Conductivity	146 Btu • ft/(hr • ft2•oF)at 68F		
Modulas 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

8mm To 100 mm

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 & Works:

217/218 Phase-II, Okha Rajkot Road, Dared, Jamnagar - 361 004. INDIA

Tel.: +91 - 288 - 2730118 | Mobile: +91 - 9328105172 mail@shree-extrusion.com | www.shree-extrusion.com



