

**CN18 C18000 Class 3**  
**(COPPER NICKEL SILICON CHROME)**  
**WROUGHT PRODUCT-EXTRUDED ROD, BAR & FORGINGS**



**ABOUT**

Heat Treatable Copper Alloy. Good strength, wear resistance and hardness, with very good electrical and thermal conductivity. Very Good Machining Properties. Beryllium Free.

**EQUIVALENT TO:**

UNS C18000, CuNi2SiCr

**APPLICATIONS:**

Resistance Welding Electrodes, Holders & Arms. Seam Welding Wheels. Stud Welding Collets.  
 Plunger Tips for Metal Die Castings. Core & Injector Pins. Mould Cavities. Heat Inserts in Steel Plastic Moulds.

<b>CHEMICAL COMPOSITON</b>						
<b>Copper %</b>	<b>Nickel %</b>	<b>Silicon %</b>	<b>Chromium %</b>	<b>Iron %</b>		
<b>REM</b>	<b>1.8 – 3.0</b>	<b>0.04 – 0.80</b>	<b>0.10 - 08</b>	<b>0.15 max</b>		<b>----</b>

<b>TYPICAL MECHANICAL &amp; ELECTRICAL PROPERTIES --- TEMPER: HT</b>							
<b>TENSILE STRENGTH</b>		<b>YIELD STRENGTH 0.2% offset</b>		<b>ELONGATION %</b>	<b>HARDNESS</b>		<b>ELECTRICAL CONDUCTIVITY % IACS</b>
<b>MPa</b>	<b>620 - 660</b>	<b>MPa</b>	<b>480 - 520</b>	<b>14</b>	<b>Rockwell HRB</b>	<b>83 -92</b>	<b>45</b>
					<b>Rockwell HRC</b>	<b>11 -14</b>	
<b>KSi</b>	<b>90 - 95</b>	<b>KSi</b>	<b>70- 75</b>		<b>Brinell HB</b>	<b>183 - 191</b>	
				<b>Vickers HV</b>	<b>183 - 197</b>		