

## Bellman-Melcor

7575 W. 183<sup>rd</sup> Street

Tinley Park, IL 60477

LOCAL: 708-532-5000

TOLL FREE: 800-367-6024

[bellmanmelcor.com](http://bellmanmelcor.com)



## #110 (BCu-1b)

### TECHNICAL DATA

<b>NOMINAL COMPOSITION</b>	<b>Copper</b>	99.90% Min
	<b>Other Elements, Total</b>	0.10% Max
<b>PHYSICAL PROPERTIES</b>	<b>Color</b>	Copper
	<b>Solidus</b>	1981°F (1083°C)
	<b>Liquidus</b>	1981°F (1083°C)
	<b>Recommended Brazing Temperature</b>	2000-2150°F (1093-1177°C)
	<b>Density (lbs./in<sup>3</sup>)</b>	0.32
	<b>Specific Gravity</b>	8.94
	<b>Electrical Conductivity (%IACS)</b>	101
	<b>Electrical Resistivity (Microhm-cm)</b>	1.71
<b>USES</b>	#110 is a fluid filler metal used for brazing of ferrous and nickel-based alloys, in particular, steel, stainless steel and copper-nickel alloys. This alloy is typically used in furnace braze applications without the use of flux.	
<b>BRAZING CHARACTERISTICS</b>	#110 is a free-flowing filler metal that exhibits good wetting characteristics on ferrous and nickel based materials. Maximum strength and joint integrity are obtained where joint clearance falls within the range of 0.000in – 0.001in (0.000-0.025mm) per side.	
<b>PROPERTIES OF BRAZED JOINTS</b>	The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.	
<b>SPECIFICATIONS</b>	#110 alloy conforms to: American Welding Society (AWS) A5.8/A5.8M BCu-1b, Unified Numbering System (UNS) C11000, and ASTM B152 C11000	
<b>AVAILABLE FORMS</b>	Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.	

Individuals requiring further information and Engineering Specification Documents may wish to contact the Engineering Society for Advanced Mobility, Land Sea Air and Space, The Society of Automotive Engineers <http://www.sae.org/> (SAE AMS) or The American Welding Society (AWS) <http://aws.org/>

## **NOTE:**

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