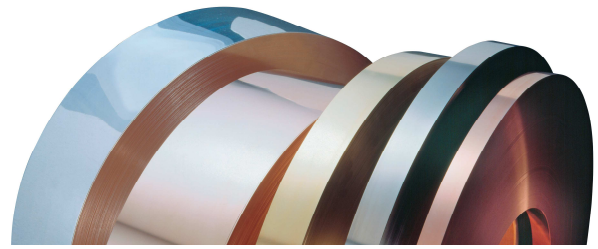


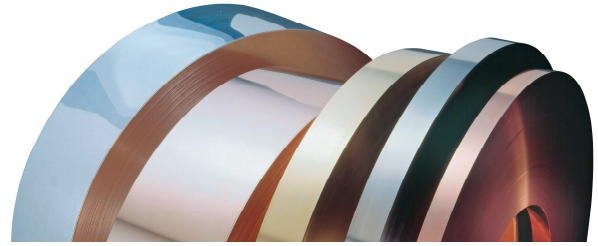
High-Performance Alloys BB01



Material Designation		Nominal Composition (mass content in %)		About The Alloy
DIN-EN Symbol	CuSn0,15	Cu	Balance	
DIN-EN	CW117C	Sn	0.12	
UNS	C14415	Fe	< 0.02	
JIS	C1441	Ni	< 0.02	
		Zn	< 0.1	
		Pb	< 0.005	
		P	< 0.015	
Physical Properties		Typical Applications		
Electrical conductivity soft	48 MS/m	<ul style="list-style-type: none"> • Age-hardenable alloys for connectors and power transistor carriers and semiconductor devices • Leaf springs for relays • Stamped-bent parts • Transistor carriers • Connector pins • Carriers • Car electrics 		
Thermal conductivity	360 W/(m·K)			
Thermal expansion coefficient **	17 10 ⁻⁶ /K			
Density	8.9 g/cm ³			
Modulus of elasticity	128 GPa = kN/mm ²			
* Reference values at room temperature				
** Between 20 and 300 °C				

Mechanical Properties *)						
Temper condition		O R 250 H 60	H02 R 300 H 85	H04 R 360 H 105	H06 R 420 H 120	H08 R 460 H 135
Tensile strength in N/mm ²		250 - 320	300 - 370	360 - 430	420 - 490	> 460
0.2 % yield Strength in N/mm ²		200	250	320	400	410
Elongation A _{LS0} %		> 15	> 4	> 3	> 2	> 2
Vickers hardness HV		60 - 90	85 - 110	105 - 130	120 - 140	> 135
Electrical conductivity in % IACS		83	83	82	82	82
Minimum radius of the bending mandrel for 90° bend and strip thickness s, tempered quality						
0.10 ≤ s ≤ 0.25 mm	transverse	0 x s	0 x s	0 x s	1 x s	1.5 x s
	parallel	0 x s	0 x s	0 x s	1 x s	1.5 x s
0.25 < s ≤ 0.5 mm	transverse	0 x s	0 x s	0.5 x s	1 x s	-
	parallel	0 x s	0 x s	0.5 x s	1.5 x s	-
*) Reference values						

High-Performance Alloys BB01



Processing Instructions	
Cold forming properties	very good
Machinability	sufficient
Electroplating properties	very good
Hot-dip tinning properties	very good
Soldering	very good
Resistance welding	good
Gas shielded arc welding	good
Laser welding	good

Available Dimensions
Bright pre-rolled strips 1 to 2.5 mm
Precision strip thickness from 0.05 to 1.2 mm
Strip width from 3.0 to 600 mm, but at least 10 times of the strip thickness
Other widths available on request.

Available Versions
Coils with standard outer diameters of 1200 mm
Strips in reel form with coil weight of up to 1500 kg
Multipancake up to 2.5 t
Hot-dip tinned strips
Profiled strips
Electroplated strips (tin, nickel)

Your Local Contact Person	
Europe	Asia
<p>SUNDWIGER Messingwerk</p> <p>Sundwiger Messingwerk GmbH</p> <p>Hönnetalstraße 110 58675 Hemer Deutschland Tel. +49 2372 661-100 Fax +49 2372 661-48100 E-Mail: sales-sundwig@sundwiger-mw.com www.sundwiger-mw.com</p>	<p>SUNDWIGER Messingwerk</p> <p>Diehl Metall (Shenzhen) Co. Ltd.</p> <p>5F, Block 25, Shatoujiao Free Trade Zone 518081 Shenzhen P.R. of China Tel. +86 755 2235 7466 Fax +86 755 25260974 E-Mail: sales@sundwiger-mw.com.cn www.sundwiger-mw.com</p>

The information given in this material data sheet, which in any case provides no guarantee of particular characteristics, has been compiled to the best of our knowledge but is given without any obligation on our part. Our liability is determined solely by the individual contract terms, in particular by our general conditions of sale.

We reserve the right to make alterations especially where necessitated by technical developments or changes in availability. Please ask for the latest edition of this material data sheet.