

SM337 (C27200 / C27400)

CuZn37

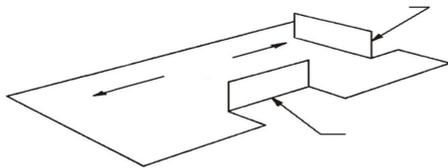
Alloy characteristics

SM337 is an important brass alloy for cold work processes with 37 % Zinc. It has good forming, solderability and great stamp ability properties. The high content of zinc contributes to higher tensile strength and helps making it one of the most cost-effective brass alloys. Typical applications for this alloy are connectors, input-output plugs, switches, light frames, decorative panels, bulb sockets, musical instruments etc.

SM337 complies to the requirements of the OEKO-TEX Standard 100 in terms of the PB and Cd.

Mechanical properties	Temper condition					
	030 R290	H01 R36 0	H02 R41 0	H03 R46 0	H04 R49 0	H06 R55 0
Tensile strength in N/mm ²	290-370	360-440	410-490	460-530	490-560	550-640
0,2% yield strength in N/mm ²	<190	>200	>300	>380	>450	>500
Vickers hardness HV (ref.value)	55-95	95-125	120-150	140-170	155-185	170-200
Elongation A _{L50%}	> 40	> 30	> 15	> 10	> 5	> 1

Bending metals is one of the most common practices in metal processing worldwide. It is a process by which metal can be deformed when applying force to the subject, which causes it to bend at an angle and form the anticipated shape, which often results in it being in a 'V' or a 'U' shape.



0.10 ≤ t ≤ 0.25mm	Transverse	0.0 x t	0.0 x t	0.0 x t	0.0 x t	0.0 x s	0.5 x s
	Parallel	0.0 x t	0.0 x t	0.0 x t	0.0 x t	0.0 x s	1.0 x s
0.25 < t ≤ 0.5mm	Transverse	0.0 x t	0.0 x t	0.0 x t	0.0 x t	0.0 x s	1.0 x s
	Parallel	0.0 x t	0.0 x t	0.0 x t	0.5 x t	1.0 x s	2.0 x s

Physical properties (Typical values in annealed temper at 20 °C)

Thermal expansion coefficient 20 ... 300 °C	20.2	10 ⁻⁶ /K
Specific heat capacity	0.377	J/(g·K)
Density	8.4	g/cm ³
Thermal conductivity	120	W/(m·K)
Thermal coefficient of electrical resistance (0 ... 100 °C)	1.7	10 ⁻³ /K
Modulus of elasticity (1 GPa = 1 kN/mm ²) cold formed	110	GPa
Electrical conductivity (IACS)	28	%

Material designation

DIN EN	CW 508 L
UNS	C27200 / C27400

Chemical composition	
Cu	Rest %
Sn	< 0.05 %
Zn	37 %
Other	≤ 0.375 %

This information was given with the best knowledge, but cannot guarantee any characteristics we describe listed above. The contract terms of Sofia Med agreed with any individual customer and our general conditions of sales describe the liability of these conditions.

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Sofia Med SA, 4 Dimitar Peshev str, Gara Iskar, 1528 Sofia, Bulgaria
Tel: +35929606209, Fax: +3599606393, info@sofiamed.bg, www.sofiamed.bg
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