C107 (UNS C14210)

Smiths Advanced Metals

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Phosphorous Arsenical Copper

Enhanced corrosion resistance

C107 is a phosphorous de-oxidised arsenical copper which provides enhanced corrosion resistance and increased tensile strength at elevated operating temperatures up to 300°C.

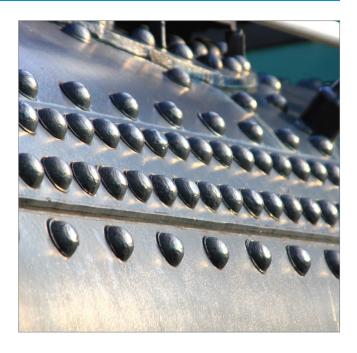
With outstanding formability and joining characteristics, C107 is a perfect material for boiler work, finding particular popularity in the steam locomotive sector for firebox repairs, stay bolts, rivets and renewal.

The alloy is free from the effects of hydrogen embrittlement, resulting in it being an ideal material for applications involving brazing and welding.

Smiths Advanced Metals stocks C107 bars in half-hard condition. Our bar products are available in close incremental sizes, often with both metric and imperial options.

Grades / Specifications

- BS 2871
- BS 2875
- CuAsP
- UNS C14210



Key Applications

- Stay bolts
- Rivets
- Fireboxes

Chemical Composition (weight %)								
	Cu	Sn	Pb	Fe	Ni	As	Р	Impurities
min.	99.20					0.30	0.013	
max.		0.01	0.01	0.03	0.15	0.50	0.020	0.07

As per BS 2871

Chemical Processing

The chemical processing sector also makes use of C107 copper, particularly in chemical plants and equipment for relatively non-corrosive liquids and gases, where any processing functions at moderately elevated temperatures.

C107 also finds suitability in sour gas applications as the alloy is not susceptible to hydrogen-induced cracking.



Technical Sales Assistance

To find out more about the C107 copper bars and for other technical advice, contact Smiths Advanced Metals today. Our team of qualified metallurgists and engineers will be pleased to assist further on any technical topic.

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