

Thermal Spray Wires Technical Bulletin

SG 400 Copper

Item code: 98W400317C04

Issue: 01/03/2019

Applicable for:  Arc Spray  Flame Spray

PRODUCT INFORMATION

Pure copper wire has excellent conductivity and produces dense, well bonded coatings with excellent machinability. Copper is recommended for arc or flame spray and is widely used for electrical conductivity and decorative coatings.

NOMINAL CHEMICAL COMPOSITION (%)

Cu	99.9
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WIRE PROPERTIES

∅ Wire	1/8 inch (3.17 mm)
Morphology	Solid
Conductivity	57 μS/m
Melting Point	1894° F
Density	8.96 g/cm ³

COATING FEATURES (nominal data)

Hardness	HRB 67
Bond Strength	~ 7000 PSI
Coverage	0.7 oz/ ft ² / mil
Deposition Efficiency	80%
Max service temperature	1380° F

APPLICATIONS

- Electrically conductive surfaces
- Carbon brushes
- EMI protection
- Discharge electrodes
- Decorative Purposes

SURFACE PREPERATION

Surface should be clean, white metal, with no oxidation, oil, grease or dirt on the surface. Recommended method of preparation is to grit blast with 24 mesh aluminum oxide, rough grind, or rough machine in a lathe. Note: It is best not to handle the surface after cleaning.

PACKAGING

Coil	Paper Wrapped
Weight	50 lbs ± 5 lbs.

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