

Silicon Bronze

Copper Alloy Wire

(AWS ERCuSi-A)

Silicon Bronze is used for inert gas welding of metals with copper basis such as copper silicon, copper zinc and galvanized sheets, also connected to steel. And fixing in artistic foundries, for welding galvanized sheets and even as coating of steel using the MIG and TIG methods. It's also suitable for surfaces subject to corrosion.

Classification

AWS A5.7	ERCuSi-A
DIN 1733	SG-CuSi3

Physical Properties

Tensile Strength	330-370MPa/mm ²
Elongation	40%
Hardness	80-90 HB

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG	Direct current (DC)
TIG	Alternating current (AC)

Chemical Composition

	Si%	Fe%	Cu%	Mn%	Mg%	Cr%	Ni%	Zn%	Ti%	Al%
AWS Requirements	0.95	0.95	0.05-0.20	0.05	—	—	—	0.10	—	99.0min
Typical Results	0.30	0.18	0.065	0.02	—	—	—	0.02	—	Rest

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	...	...	...	...				
TIG Rod				...	...	...	...	...

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire	0.5Kgs	2Kgs	7Kgs	7Kgs	7Kgs	
TIG Rod						5Kgs or 10Kgs

Aluminum Bronze A2



Copper Alloy Wire

(AWS ERCuAl-A2)

Aluminum Bronze A2 is generally used for joining aluminum-bronze or similar compositions, for manganese, silicium, bronze and some copper-nickel alloys. Also used for joining dissimilar alloys such as copper and steel, cast iron, bronze.

Classification

AWS A5.7	ERCuAl-A2
DIN 1733	SG-CuAl9Fe

Physical Properties

Tensile Strength	390-500MPa/mm ²
Elongation	40%
Hardness	90-120 HB

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG	Direct current (DC)
TIG	Alternating current (AC)

Chemical Composition

	Si%	Fe%	Cu%	Mn%	Mg%	Cr%	Ni%	Zn%	Ti%	Al%
AWS Requirements	0.95	0.95	0.05-0.20	0.05	—	—	—	0.10	—	99.0min
Typical Results	0.30	0.18	0.065	0.02	—	—	—	0.02	—	Rest

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	...	...	...	...				
TIG Rod				...	...	...	...	...

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire	0.5Kgs	2Kgs	7Kgs	7Kgs	7Kgs	
TIG Rod						5Kgs or 10Kgs

Low Fuming Bronze



Copper Alloy Wire

(AWS RBCuZn-C)

Low Fuming Bronze is generally used for steel, copper alloys, cast iron, nickel alloys and stainless steel. It's available in a flux coated TIG rod.

Classification

AWS A5.8 RBCuZn-C

Physical Properties

Tensile Strength 386MPa/mm²
Hardness 80-110 HB

Welding Positions



Shielding Gas

Argon
Helium
Argon/Helium-mixtures

Polarity

MIG Direct current (DC)
TIG Alternating current (AC)

Chemical Composition

	Si%	Fe%	Cu%	Mn%	Mg%	Cr%	Ni%	Zn%	Ti%	Al%
AWS Requirements	0.95	0.95	0.05-0.20	0.05	—	—	—	0.10	—	99.0min
Typical Results	0.30	0.18	0.065	0.02	—	—	—	0.02	—	Rest

Diameter

	0.8mm	0.9mm	1.2mm	1.6mm	2.0mm	2.4mm	3.2mm	4.0mm
MIG Wire	...	...	...	...				
TIG Rod				...	...	...	...	...

Packaging

	D100	D200	D300	K300	KS300	Box
MIG Wire		5Kgs	15Kgs	15Kgs	15Kgs	
TIG Rod						5Kgs or 10Kgs