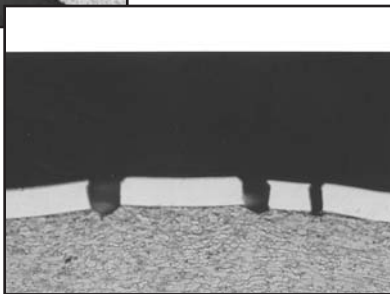
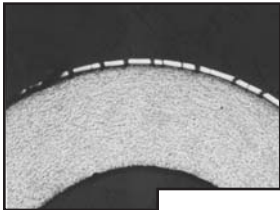


SILVER (NON-CYANIDE) CODE 3084 / 5870

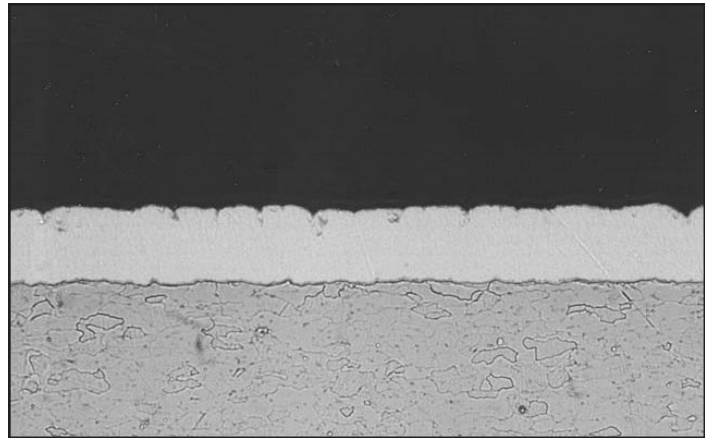
Why Use Silver?

- ⇒ Reduce Contact Resistance
- ⇒ Improve Lubricity
- ⇒ Increase Reflectivity
- ⇒ Inhibit Fretting Corrosion
- ⇒ Provide Soft Seal Surface



Silver (Non-Cyanide) - 200x

Cross section of a 0.0003" thick silver deposit plated onto a copper substrate and then subjected to a tensile bend. The deposit has torn in the bend area and exhibits excellent cohesion, as well as adhesion to the substrate.



Silver (Non-Cyanide) - 200x

Silver plated onto a copper substrate and then baked at 400 °F for 4 hours.

Deposit Data

Silver (Non-Cyanide) Code 3084

Purity	99.61%
Structure	Dense
Contact Resistance*	0.28 Milliohms
Adhesion	10,000 psi minimum
Hardness	115 HV
Maximum Thickness	0.010"
Plating Rate	.020"/hr.

* This value is based on a deposit thickness of approximately 0.0003" of silver plated onto a copper substrate and tested using a cross wire method under a 200g load.

Safe - Does not contain cyanide. (see back for more information)

Fast - Applied at the rate of 0.020" per hour.

Adherent - Excellent adhesion to all commonly used base metals. Not an immersion deposit.

Consistent - Ability to accurately control deposit thickness.

If you are using a cyanide silver, consider the following:

- Mistakes with a cyanide solution can be fatal! Mixing cyanides with acid containing chemicals will release a deadly cyanide gas.
- Prudent practices require you to have, on-hand, a very expensive cyanide antidote kit when working with cyanide solutions.
- Cyanide silvers have a National Fire Protection Rating (NFPA No. 704) of 3-0-1. Our Non-Cyanide Silver's NFPA rating is 2-0-0.
- Cyanide plating solutions have special storage/security requirements.
- You must file a report with the Environmental Protection Agency (EPA) when you release to the environment the Reportable Quantity (RQ) that is more than 2.5 liters or 1 pound of potassium silver cyanide. The Reportable Quantity for our Code 3084 Non-Cyanide Silver is 4000 liters or 37, 145 pounds.
- Cyanide silvers cost more to package, ship, store, and dispose, and they have more regulatory control requirements.

A Comparison of Tank and SIFCO Silver Deposits

	Tank Cyanide Silver	SIFCO Cyanide Silver	SIFCO Non-Cyanide Silver
Purity (%)	99.5 to 99.9	99.7	99.6
Adhesion	Excellent	Excellent	Excellent
Microhardness (HV)	40 - 185	116	116
Appearance	Matte to Shiny	Matte to Shiny	Milky-Matte to Shiny
Structure	Columnar to Lamillar	Dense	Dense, Lamillar
Density (g/cc)	9.2 - 10.5	10.1	10.1
Strength (psi)	2100 to 3500 tensile	1414 tensile	1854 tensile
Contact Resistance (milliohms)	0.4	0.28	0.28
Plating Rate (in/hr)	0.002	0.04	0.02

Approved for use by Military and commercial, including Boeing, Cleveland Regional Transit Authority, Duke Power, General Electric, Sikorsky, Florida Power and Light, Northeast Utilities, Ontario Hydro, Raytheon, Siemens-Westinghouse, TVA

Meets the performance requirements of QQ-S-365



ISO 9001 & AS 9100 Registered Quality Systems

*Advancing Selective Plating . . .
... and Moving Beyond*

World Headquarter
5708 E. Schaaf Road
Independence, OH 44131
U.S.A.

Toll Free (US & Canada): 1-800-765-4131
Tel: +1-216-524-0099 / Fax: +1-216-6331

Email: info@sifcoasc.com
Website: www.sifcoasc.com