

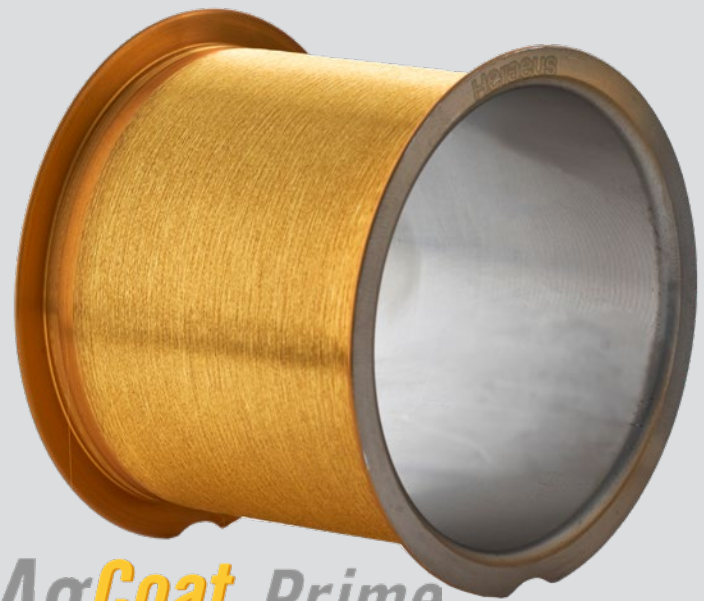
New Product: AgCoat® Prime

The Perfect Match of Performance and Cost

AgCoat® Prime, the world's first real substitute for gold wire in the memory market that ensures high performance at reasonable costs. AgCoat® Prime is a silver alloy core base wire coated with a gold layer on the exterior. With this uniquely engineered wire, you benefit from lower costs, reduced manpower and better production line time management.

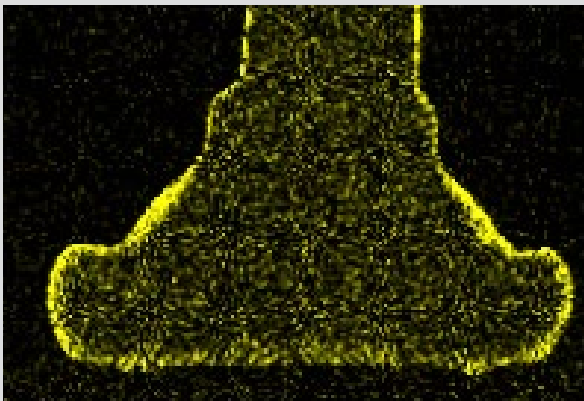
AgCoat® Prime benefits

- Gas-free FAB formation in bonding process
- Longer floor life (60 days) compared to Ag alloy wire
- Improves second bond workability
- Improved reliability performance on HTS and TC compared to Au wire
- Retain your existing facility infrastructure to avoid any CAPEX investment
- Reuse of existing ball bonders in your production floor
- Slower IMC growth rate compared to Au wire
- Comparable MTBA to Au wire (min.4 hours)

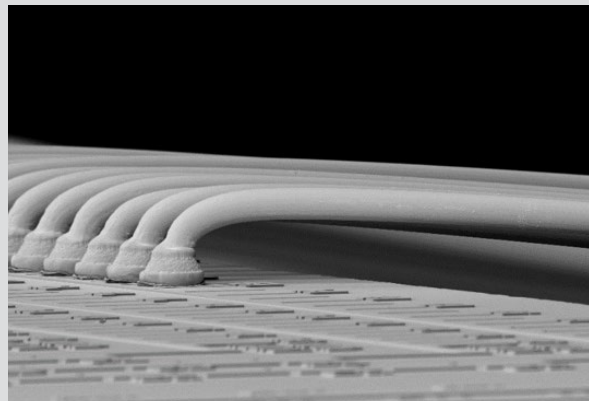


AgCoat Prime

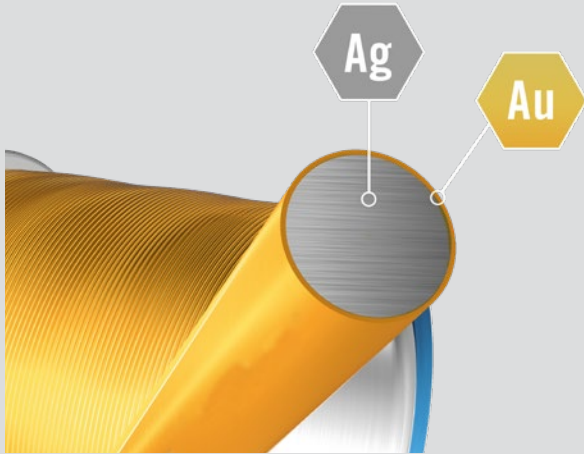
Au Coverage and Low Loop Bonded Wire



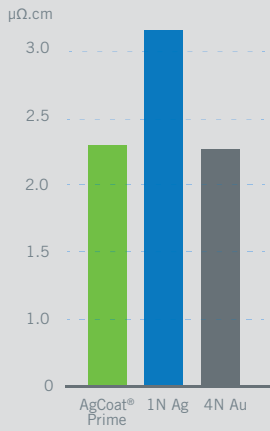
Au coverage on bonded ball



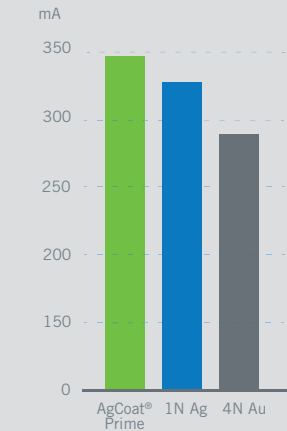
Ultra low loop height requirement of max 2.4 mils without sign of neck crack



Electrical Resistivity



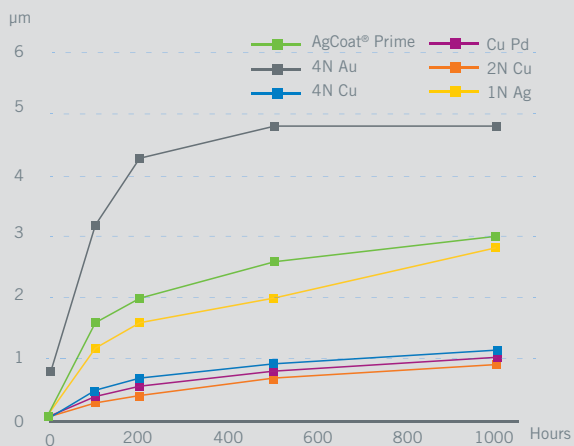
Fusing Current



Benefits / Performance Comparison



IMC Growth



Heraeus Electronics
 Heraeus Deutschland GmbH & Co. KG
 Heraeusstraße 12-14
 63450 Hanau, Germany
 www.heraeus-electronics.com

Americas
 Phone +1 610 825 6050
 electronics.americas@heraeus.com

China
 Phone +86 21 3357 5457
 electronics.china@heraeus.com

South Korea
 Phone +82 31 270 9400
 electronics.korea@heraeus.com

Asia Pacific
 Phone +65 6571 7677
 electronics.apac@heraeus.com

Europe, Middle East and Africa
 Phone +49 6181 35 3627
 electronics.emea@heraeus.com

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo, Heraeus and AgCoat® are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.