

金めっき浴中における銅不純物の電解除去による管理技術

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Bath Control Technique by Electrowinning of Copper Ion Impurities in the Process of Gold Plating

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Abstract

There are so-called wire bonding methods to electrically connect semiconductor IC chips and printed wiring boards. Typically, gold plating is applied to the connection terminal pad on the wiring board, and the higher the purity of the plated gold film, the higher the connection strength of the wire and the better the long term reliability. But in the process of manufacturing printed wiring boards, it is impossible to completely avoid impurities in the plating bath. In this study, we removed impurities in the gold plating bath using constant potential electrolysis at several different electrode potentials, and we discuss the performance of this technique for the removal of impurities in the gold plating bath.

Key Words: *Electrowinning, Gold, Copper, Wire Bonding, Printed Wiring Board, ICP*