

# 不溶性アノードによる硫酸銅めっき添加剤消耗原因の検討

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## Study on Accelerated Additive Consumption by the Use of Insoluble Anode in Acid Copper Plating

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### Abstract

It is widely known that the use of insoluble anodes result in a greater quantity of additive consumption than phosphorised copper anodes. Consequently, the insoluble anode is covered with a permeable membrane in use, but recently, insoluble anodes that do not cause considerable additive consumption without permeable membrane have been reported. This paper reports on the result of our study on the cause of substantial additive consumption that results from the use of insoluble anodes. As a result of the study, it is clearly suggested that in the acid copper plating bath containing chloride ions, hypochlorite is generated at the surface of the insoluble anode by the chloride oxidation reaction, and the hypochlorite decompose the additives by oxidation.

**Key Words:** *Insoluble Anode, Acid Copper Plating, Permeable Membrane, Oxidizing Agent, Chloride Ion*