

Copper Electroplating Parameters Optimization

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Abstract

Copper electroplating is a well-known and widely used industrial surface finishing process, however it becomes less attainable when complex geometries meet tight tolerances. The work presents a copper plating process for an accelerator component, which was modeled via the COMSOL Multiphysics® Electrodeposition Module. The objective was to evaluate two existing copper plating baths and its impact on the current density distribution and other plating parameters. Only electrochemical parameters were taken into account.