

Abstract

Appliance of electroplating in instruments. Designing of technological process of coating printed circuit boards with copper.

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This project discusses the procedure of electroplating of circuit boards with copper coating. Importantly, the process is held in sulfate electrolyte with addition of Cupracid TP and Cupracid Glanzzualtz. Circuit boards are coated to enhance electrical connection between elements in case of thermal shock. The project is aimed at designing of an electrolyzer capable to produce 115000 PCB per year. The project also addresses important issues of occupational safety and health, particularly, safety measures, ventilation and lightening. Additionally, the paper argues for minimizing ecological impact of the workshop activity through implementing appropriate way of savage water treatment. Eventually, the project highlights automatization and economical issues.

Key words: initial electroplating with copper, electrolyzer, automatic line, current density, sulfate electrolyte, circuit board, current source.