

STUDIES OF ROLE OF ADDITIVES ON ELECTRODEPOSITION OF

ZN-MN-MO ALLOY FROM CITRATE BATH

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ABSTRACT

The ternary Zn-Mn-Mo alloys were electrodeposited containing Zinc sulphate $30gL^{-1}$, Manganese sulphate $60gL^{-1}$, Ammonium molybdate $4gL^{-1}$, Citric acid $5gL^{-1}$ and Starch $1gL^{-1}$ in presence of one of the following additives: glycine, urea, sulphosalicyclic acid, sucrose or thiourea. Smooth, bright grey deposits were formed in presence of these addition agents. Effect of concentrations of these additives on deposit composition, cathode efficiency, cathode polarization and throwing number of the bath were also studied.

KEYWORDS: Additives, Composition, Cathode Efficiency, Polarization, Throwing Number