

ABSTRACT

«Electroplating in light-technical industry. The development of bright coating bi-nikel technology on a steel parts with complex configuration»

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Diploma project, 2019. Number of pages – 80, tables - 20, pictures - 7 and literature - 22.

In this project was developed process of galvanic bright coating bi-nikel on a steel mounting plate, in order to increase corrosion-resistant. The deposition of the frosted-coating is made from a sulfate-electrolyte of nickelage with leveling supplements, and the bright-coating is made from sulfate-electrolyte of nickelage with additives in an electrolyzer at a cathode current density of 3 A/dm^2 in case of semibright-coating and cathode current density of 4 A/dm^2 in case of bright-coating. In the project are carried out constructive and technological calculations, selected relevant equipment, developed a scheme for automatic regulation of bright coating bi-nikel. Calculations of energy economy, salary and technical and economic indicators are executed. The project used a scheme for wastewater treatment by reagent method and reverse osmosis, analyzed harmful and hazardous production factors and proposed measures for safety and occupational safety.

Key words: galvanic coatings, bi-nikel coating, galvanic bath, bright nickelage, voltage balance, electrolysis, wastewater.