

ABSTRACT

«Electroplating in light-technical industry. The development of brightnickel coating technology on a steel parts»

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In this project was developed process of galvanic nickel bright coating on a steel 'bridge', in order to increase corrosion-resistant. The deposition of the frosted-coating is made from a tetrafluoroborate-electrolyte of nickelage, and the bright-coating is made from sulfate-electrolyte of nickelage with additives in an electrolyzer at a cathode current density of 10 A/dm^2 in case of frosted-coating and cathode current density of 10 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 nickel coating. 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, nickel coating, galvanic bath, bright nickelage, voltage balance, electrolysis, wastewater.