

ABSTRACT

Galvanic coatings in instrument making. Development of technology for applying chromium coating to nickel sublayer.

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The project developed a technology application plastic chrome coating of 9 microns thick with nickel under layer, to improve decorative appearance. Deposition of the chromium held from tetra chromium electrolyte in the stationary cell with a cathode current density of 40 A/dm^2 and a temperature of $20 \text{ }^\circ\text{C}$. The project conducted design and engineering calculations selected the appropriate equipment, developed a scheme of automatic regulation of chrome plating. Calculations of energy management, technical and economic indicators. The project has used reagent method wastewater treatment, analyzed the harmful and dangerous production factors and proposed measures of safety.

Keywords: electroplating, chromium, galvanic baths, stationary electroliser, voltagebalance, electrolysis, wastewater.