

ABSTRACT

" Electroplating in machine building. Development of the technology of decorative oxidation of aluminum parts with subsequent coloring »

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The technological process of decorative oxidation of aluminum parts with subsequent coloring is developed. The anodizing is carried out in a sulfate electrolyte at a temperature of 18 ... 25 °C, anode current density of 1.25 A / dm² and at a voltage of 16.648 V.

The project carried out constructive and technological calculations, developed the scheme of automatic control of the anodizing process. Calculation of basic technical and economic indicators is given. The scheme of sewage treatment with reagent and ion-exchange methods is given. The analysis of harmful and dangerous factors at work was carried out and safety and health measures were proposed.

Keywords: oxidation, oxide film, aluminum, anode, cathode, sulfate electrolyte, galvanic bath, waste water, balance energy.