

ABSTRACT

Electroplating in Mechanical Engineering. The development of decorative oxidation technology for aluminum details in the color of gold

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The decorative oxidation technology for aluminum details in the color of gold has been developed in the project. Oxidation is conducted in a sulfuric acid electrolyte at a temperature of 18 – 20 ° C, anode current density 2 A/dm² and voltage 17 V. Coloring of the oxide film is conducted in a solution of organic dyes.

In this diploma thesis engineering calculations have been conducted, automatic control scheme of the process has been developed. The project describes measures for safety, electro dialysis as method of sewage treatment. In addition, main technical and economic indicators have been calculated.

Keywords: anodizing, aluminum, sulfate electrolyte, anode, cathode, galvanic bath, oxide film, automatic control, carrying value, workplace health and safety.

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<i>Из</i>	<i>Лист</i>	<i>№ докум.</i>	<i>Подп.</i>	<i>Дата</i>
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<i>Перев.</i>	<i>Фроленкова</i>			
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