

ABSTRACT

«Galvanic coatings in instrument making. Development of the technological process of applying nickel coating on brass parts»

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The technological process of nickelization of brass parts is developed. Nickelation is carried out in a sulfamate electrolyte at a temperature of 40 - 50 °C, at a cathode current density of 5 A / dm² and a voltage of 3,19 V.

The current and voltage balances, energy and heat in the bath, the charges of the electrolyte and water for the initial launch of equipment and for the execution of the annual program are recalculated.

In the diploma project the scheme of automation of the process of application of nickel coating is developed. Also calculated technical and economic indicators. The scheme of sewage treatment is developed. Safety measures are considered, which include the normalization of working area air, industrial lighting, protection against noise, vibration and electric shock, and fire safety.

Key words: nickel, sulfamate electrolyte, brass parts, galvanic bath, current, voltage, ecological safety, sewage, safety equipment.