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CHROMIUM-PLATING OF COMPONENTS

Chromium is called the process of obtaining hard wear-resistant galvanic coatings with chromium from an aqueous solution of chromic anhydride and sulfuric acid.

By chromium, a fine-grained coating with a microhardness of 4000-12000 MPa with a low coefficient of friction and high grip is obtained. Chrome is chemically resistant against the effects of many acids and alkalis, heat-resistant, which provides the parts with high wear resistance, even in very difficult operating conditions, which exceeds 2.5 times the wear resistance of hardened steel. The most durable coating is the hardness of 7000-9200 MPa. However, chromium- plating is an energy-intensive, expensive and low-productive process.

Chroming is used for the following purposes:

- increase of wear resistance and working life of conjugate working (rubbing) roller bearings of machine parts, molds, stamps, measuring and cutting tools;
- restoration of low-level worn-out responsible components of assembly units of cars;
- protective and decorative chroming of machine equipment;
- increase of reflective ability during the manufacture of mirrors, reflectors.

Chromium has the following features: the main component of the electrolyte is chromium anhydride (CrO3), which forms chromic acid during dissolution in water (CrO3 + H2O = H2CrO4). The main component of other processes is the salt of precipitated metal. Chromium is precipitated only in the presence of a certain amount of foreign ions in the electrolyte, first of all sulfates (SO4) .The electrolytes have a

hexagonal chrome. The mechanism of its deposition is very complicated and still insufficiently studied.

During chromium-plating a large part of the current is spent on side processes, including water dispersal and rapid hydrogenation, resulting in a low chromium output (10-40%). With the concentration and temperature increase of the electrolyte, the current output decreases, while during the deposition of other metals, on the contrary, increases.

The insoluble anodes made from lead or its alloy with 6% antimony are applied. When using insoluble anodes, the electrolyte is constantly impoverished, so it is periodically monitored and corrected, adding chromic anhydride. Chromium anhydride dissolves during electrolysis with anode current output, which is 7-8 times higher than the current output on the cathode. As a result, the concentration of chromium ions in the electrolyte is continuously increasing.

The relationship between the concentrations of chromium anhydride CrO3 and sulfuric acid H2SO4 has a great influence on the process of chromium plating. For deposition of high quality coatings with the highest current output, it is necessary that this ratio be equal to 100 (it is allowed to change within 90-120). For the same purpose 1-2% of the amount of chromium anhydride of trivalent chromium ions are added in an electrolyte. Trivalent chromium is obtained by treating an electrolyte with a current density of 4-6 A / dm2. During the processing of the electrolyte, for each of its liter 3-4 A-hours of electricity are passed. Galvanic coatings are widely used in the repair of vehicles to protect parts from corrosion and provide them with aesthetic appearance.

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NATIVE ADVERTISING AS A COMING TYPE OF INTERNET MARKETING

Nowadays online marketing is one of the most efficient methods of spreading information about goods, services or a business itself, that is addressed to a chosen group of people and has an aim to convince them. Unlike newspapers, radio and television, the audience on the Internet make requests of something it's interested in; today we can talk about the beginning of *«information upon request»* era: potential customers don't want to use censored sources of information which have some kind of a curator.

Purpose and objectives. This paper aims to find the determination of native advertising and its attributes.

The importance of this theme is explained with the following statement: with the growth of social networks' popularity, the problem of a classical banner advertisements has become obvious – in endless sources of information people ignore a thing they are not interested in directly, looking for what they want on their own.

Searching for a solution to this problem, Internet marketing community has invented so-called *natural (native) advertising*. In its core is an advertisement' desire of being perceived as a part of viewed web source, so it adapts to the context of Internet site (platform, blog, social network, etc.) and cannot be identified by users as an advertisement, therefore does not cause their rejection. In other words, native ads «thread» into the information stream and correspond to its format and content. That is in contrast to traditional advertisements, which are perceiving with difficulties due to so-called «banner blindness».