

EFFECT OF THE ELEMENTS OF ADDITION AND AGENTS MODIFIERS ON THE MICROSTRUCTURE OF ALUMINUM-SILICON ALLOYS

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ABSTRACT. The aim of the work is to study the influence of alloying elements (Si, Cu, Ni, Mg, Fe, etc.) and the agents modifiers (sodium, titanium and hexachloroethane) on the behavior of Aluminum-Silicon alloys in milling under pressure. Alloys that were studied are AlSi12Cu1Fe and AlSi12CuNiMg. Electrical motors carcasses have been made at ELECTRO-INDUSTRIES Company from these tow alloys. These alloys undergo a set of treatments: degassing, deoxidation and modification. Those carried out in AlSi12Cu1Fe are made with and without modification treatments, which allowed us to make a comparative study. For the second alloy, micrographic further study is made.

KEYWORDS: *Al-Si alloys, milling under pressure, modification treatments, porosity, phases...*