

## Modification of the AlSi7Mg0.3 Alloy Using Antimony

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The paper describes the research focused on the influence of the antimony as the modifier in the one of the most common aluminium foundry alloys – alloy AlSi7Mg0.3. The aim of described experiment was to examine the antimony addition influence on the AlSi7Mg0.3 alloy microstructure changes. The description of the changes was performed based on the analysis realized using confocal laser microscope and electron microscope complemented by energy dispersive spectrometry in microstructure induced by the addition of antimony. The changes in the alloy microstructure, which were evoked by the addition of antimony, caused the mechanical properties changes (especially ductility). This is the main purpose of the Al-Si alloy modification process. Mechanical properties of the alloy were analysed using static tensile test and the main parameter of the observed changes was the increase in ductility.

**Keywords:** Al-Si Alloy, Microstructure Changes, Modification, Ductility, Antimony

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**Paper number:** M2017123

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