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**INVESTIGATION OF THE INFLUENCE OF COOLING RATE ON SHRINKAGE CAVITY AND POROSITY FORMATION IN AL-SI ALLOY<sup>7</sup>**

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***Abstract:** The report presents the results of a study the shrinkage porosity in Al-Si alloy with sub eutectic composition. The influence of the cooling rate (using metal and sand moulds) on the shrinkage cavity volume and porosity was studied. The results illustrate the effect of liquid and solid state shrinkage of the metal on this phenomenon. Simulation experiments were also carried out and analysed.*

***Keywords:** Manufacturing technologies, Foundry technologies, Casting of metals, Porosity*

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